



## DETERMINANTS OF STRESS AMONG THE TEACHING PERSONNEL OF THE KALINGA-APAYAO STATE COLLEGE

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**Abstract:** This study aimed to assess the indicators of job stress of the teaching personnel of a higher education institution as well as the significant relationship of the job stressors on their age, sex, civil status, and status of appointment at the institution. Across-sectional survey design was used. Descriptive statistics were used to determine whether there are significant relationships in the level of stress as manifested by the respondents with respect to their age, sex, status of appointment, civil status, and highest educational attainment. The participants included 100 teaching personnel of the institution.

The respondents registered medium degrees of stress; however, they showed high levels of stress along issues regarding promotion opportunities and feedback. It is recommended that regular assessment of stress level should be conducted for preventive measures. Direct physiological measures of stress like diagnostic tests and consultation should be conducted by the Guidance Center and Medical Clinic. It is further recommended that policies on promotions, development, and training opportunities should be clearly and regularly disseminated not only to the academic personnel but also to the other employees of the state college. The state college should devise a system that continually reinforce faculty performance and recognize outstanding faculty achievements.

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## INTRODUCTION

Stress is a prevalent problem in modern life (Smith, 2000; Chang & Lu, 2007). In 1964, Selye was the first to use the term “stress” to describe *a set of physical and psychological responses to adverse conditions or influences* (cited from Fevre, 2003). Occupational stress can be defined as a disruption of the emotional stability of the individual that induces a state of disorganization in personality and behavior (Nwadiani, 2006). A stressor may be defined as any “demand made by the internal or external environment that upsets a person’s balance and for which restoration is needed” ( Larson, 2004).

Job stress, also known as occupational stress, has been defined as the experience of negative emotional states such as frustration, worry, anxiety and depression attributed to work related factors (Kyriacou, 2001). Occupational stress in the human service professions, particularly in teachers, has been a focus of study in the last decades.

Historically, working in a higher education institution hasbeen considered relatively stress-free and highly satisfying (Willie & Stecklein, 1982). In addition, Watts et al. (1991)found that 75% of university workers who reported longworking hours, work overload and lack of support werenevertheless satisfied with their jobs. Doyle and Hind (1998)also found that 40% of female university lecturers in their sample who reported long working hours, still found their jobs intrinsically motivating, enjoyable andpotentially rewarding. A possible explanation for this might be differences in work context factors, e.g. higherlevels of autonomy, clarity and tenure and a 'collegiateculture', which emphasizes consensual decision-making and shared values (French, Caplan & Van Harrison, 1982) andworking conditions.

Recent trends brought about by globalization have forced higher education institutions to change, if they are to survive (Gilbert, 2000). Academics now face demands for greater accountability, value for money, efficiencyand quality and increasing work load caused by massification of student numbers (Gilbert, 2000 ).These challenges, changes will certainly have an impact on the well-beingof teachers at higher education institutions. Combined with agradual erosion of pay and job security, these stressors are nowbeing reflected in lower levels of job satisfaction and commitment (Kinman & Jones, 2003). Psychological stress now appears to be a feature of occupationallife for university staff, occurring in increasing levels.



This study aimed to identify the job stressors for the teaching personnel in the Kalinga-Apayao State College and to assess the relationship between job stressors and the profile of the respondents. It intends to determine whether the teaching personnel of the state college are affected by job stressors identified in previous studies and to come up with recommendations that will specifically address the situation in the Kalinga-Apayao State College.

## CONCEPTUAL FRAMEWORK

There are several theories of occupational stress, the “*person-environment fit*” theory, the “*demand-control*” theory and the “*cybernetic and systems*” theory will be the selected theories since they are prevalent and central to the literature on occupational stress (Fevre., 2003). Moreover, they are representative of the range of theories in that they tend to emphasize various sources and interactional models for the induction of stress as well as different outcome measures for the management of stressors (Fevre., 2003).

According to the Person Environment fit theory, stress and stressors are not defined in terms of either the individual or the environment, but rather in terms of the degree to which there is “misfit” between the two (Kenny, 1999; Fevre, 2003). The outcome set of PE fit theory consists of the individual's potential reactions to misfit, which can be characterized as either coping or defense (Rees & Redfern, 2000). Coping and defense are both potentially adaptive, neither being necessarily better or more effective than the other. On the other hand, the demand-control theory concerns the joint effects of job demands and job control on the employee well being (Kenny, 1999). According to Karasek's job demand—control model, strain occurs when high job demands combine with low opportunity to influence tasks and procedures, resulting in poor employee health and low job satisfaction (Bridger., 2007). In-frequent rest breaks, long working hours and shift work; hectic and routine tasks that have little inherent meaning, do not utilize workers' skills, and provide little sense of control (Fair- brother & Warn, 2003). Locus of control and self-efficacy may have a major impact on perceived stressors and resultant stress (Kenny, 1999; Fevre., 2003; Love et al., 2007). Thus, an increase in control is positively correlated with job satisfaction (Kenny, 1999).

Furthermore, according to the demand theory, demand is subdivided into work hazards, physical and emotional demands and role conflict (Kenny, 1999; Love et al., 2007). For stress



to exist, the demand from the environment (the job) versus the capability of the individual (the employee) will typically be considerably out of balance (Larson, 2004).

Cybernetics has been defined as a science of communication and control in man and machine; an epistemological foundation for personal and social change, which focuses on mental process, whereby individuals monitor their psychological and physiological reactions to various stressors (Kenny, 1999; Fevre et al., 2003). Cybernetic theory deals with the response of systems to information using feedback. The theory emphasizes wholeness and the interaction of component parts. It incorporates organization as unifying principles as well as incorporates non-linear theories of causation and is based upon a circular epistemology (Kenny, 1999).

Stress reactions may result when people are exposed to risk factors at work. Reactions may be emotional, behavioral, cognitive, and/or physiological in nature. When stress reactions persist over a longer period of time, they may develop into more permanent, irreversible health outcomes, such as chronic fatigue, or cardiovascular disease. Furthermore, it can also be deduced that there are two distinct types of stressors; those which are found within the individual, which include personal values, attitudes and self-concepts, and those that originate outside the individual, which include environmental.

## METHODOLOGY

### Research Design

The Kalinga-Apayao State College was selected as the study area. In answering the research questions, a cross-sectional, descriptive study design was chosen. Due to limited resources in terms of time, costs, and access, this study design was selected. Ethical permission to carry out the current study was obtained from the Academic Affairs' Officer at the state college. The study was conducted between January to June 2013.

### Objectives

This study aimed to determine the factors associated with occupational stress and their relationship with faculty age, sex, status of appointment, civil status, and highest educational attainment among the teaching personnel at the Kalinga-Apayao State College.

### Participants

The participants included academic staff of the Kalinga-Apayao State College. A total of 150 questionnaires were sent out. A total of 100 completed questionnaires were received back.



This gives a total response rate of 66.67percent. Among the 100 respondents, 44% are 21-30 years old, 43% are 31-40 year old and 17% are 41-50 years old; 38 % are male while 62% are female. On their civil status, 80% are married while 15% are single with 5% either separated or widowed. Most of the respondents are master's degree holders with 61% while 22% are bachelor's degree graduates and the remaining 17% are doctorate degree holders. Furthermore, 73% are permanent , 22% contractual and 5% are part-time instructors.

**Table 1.Demographic characteristics of the Respondents (N=100)**

<b>Age</b>	Frequency	Percentage
21-30	44	44
31-40	43	43
41-50	17	17
51 and above	6	6
<b>Sex</b>		
Male	38	38
Female	62	62
<b>Civil Status</b>		
Married	80	80
Single	15	15
Separated/Widow	5	5
<b>Highest Educational Attainment</b>		
Bachelor's Degree	22	19
Master's Degree	61	61
Doctorate Degree	17	20
<b>Status of Appointment</b>		
Permanent	73	73
Contractual	22	22
Part time	5	5

### Data Collection Method

Data was obtained from structured well designed previously pre-tested questionnaire. All the questionnaires were checked by the researcher in the presence of the employee and those missed or double-checked responses were correctly completed.

The questions included were collated mostly from previous studies about occupational stress and impact of stress on organizational performance, where both the reliability and validity of the data collection tool were tested (Manshor et al., 2003; Chen et al., 2006; Venables&Allender, 2006). Background information about the employees was collected by



asking questions such as the age, gender, civil status, education level and status of appointment.

Questions were grouped into sections according to the job stressor they assess. There is a section about role ambiguity and role conflict; promotion, development, training opportunities and feedback; participation in decision making and authority; workload; working condition and interpersonal relations. All the questions were close ended except the two last questions which left scope for the participants to add any other comments about the factors associated with job stress. The questions about job stressors were based on three-point Likert scale such that the employee would choose between "high", "moderate" and "low".

### **Statistical Procedures**

Inferential statistical analysis was carried out by using SPSS for WINDOWS (version 13; SPSS Inc, Chicago). Descriptive statistics were used to determine the mean and standard deviation. Frequencies were used to determine the number and percent of participants suffering from job stressors and for back-ground information about the employees. The null hypothesis was tested at the 0.05 level of significance, using the Chi-square to test whether there are significant relationships in the level of stress as manifested by the respondents with respect to their age, sex, status of appointment, civil status, and highest educational attainment.

Job stressors reported by more than 40% of the employees were only presented on the result tables. In scoring, the average score was calculated for each subject job stress and then this score was re-coded as low job stress (indicated by the average score of 1.00 to 1.66), medium job stress (1.67 to 2.33), or high job stress (2.34 to 3.00). The overall mean score for the sub-categories of job stressor was then calculated.

The data collected were carefully tabulated, organized, analyzed and interpreted using the following statistical tools: Frequency and Percentages were used to treat the data on the personal and professional characteristics of the faculty. Weighted Mean was used to describe the levels of stress of faculty.

## **RESULTS AND DISCUSSIONS**

The objectives of this study were to identify the job stressors for the teaching personnel in a higher education institution and to assess the relationship between job stressors and the



profile of the respondents. Reliability analysis revealed that all the dimensions were sufficiently internally consistent.

Table 2 reveals that the teaching personnel of the Kalinga-Apayao State College experience medium stress as indicated by the total average weighted mean of 2.12. It is further revealed that “promotion, development, training opportunities and feedback Issues” were considered high degree job stress affecting most of the teaching personnel with a mean score of 2.35 .This job stressor was on average reported by 85.71% of the employees. Moreover, within this job stressor, 94% of the employees reported that “there is an inadequate reward/recognition system”, 93% claim that the “same people are sent for training and development” and 92% are stressed over not being informed of the result of their evaluation. Moreover heavy workload was also considered medium level job stress with an over-all mean score of 2.25. Employees (77.67%) suffered from this stressor with 94% stating that “workload leaves no time for research and extension”, 93% are stressed because of the unrealistic deadlines” and 90% stated that workload scheme is not uniformly implemented. All the other sub-categories fall under the medium level of stress: participation in decision and authority with a mean of 2.20, relations with colleagues (2.13), working conditions (2.09) and role ambiguity and conflict (1.96).

Among the job stressors, “My workload leaves no time for research and extension” obtained the highest mean of 2.59 followed by “there is an inadequate reward/recognition system” with a mean of 2.52. Both means are described as

‘high’ level of stress. On the other hand, the lowest mean of 1.43 or ‘low level of stress’ is obtained by “I am subject to personal harassment in the form of unkind words or behavior” under the relations with colleagues sub-category.

**Table 2. Job stressors and their sub-categories affecting the teaching personnel of**

**Kalinga-Apayao State College (N=100)**

Job Stressors	% of Teachers	Mean
<b>ROLE CONFLICT AND ROLE AMBIGUITY</b>		
I often perform tasks that are too boring	61	1.75
I often receive assignments without the resources to complete them ( staff, money, etc.)	85	2.20
I sometimes have to break a rule or policy in order to carry out an assignment	46	1.97
I have to do things that should be done differently	73	1.79



In general I perform work that does not suit my values	49	1.73
Receiving too much pressure from too many people	92	2.25
There was more than one time sudden unplanned change	64	1.90
I work with people who expect too much from me	90	2.07
<b>Percent within all categories</b>	<b>70</b>	<b>1.96</b>
<b>PROMOTION, DEVELOPMENT, TRAINING OPPORTUNITIES AND FEEDBACK</b>		
There is an unfair promotion system in the college	69	1.97
There is an inadequate reward/recognition system	94	2.52
The state college lacks offers of training and development opportunities	89	2.39
The state college sends the same people for training and development	93	2.45
Policies rather than performance determine who should be promoted in my department	91	2.35
There is not a well-defined performance evaluation procedure which is implemented	72	2.32
Not knowing the results of my evaluation	92	2.45
<b>Percent within all categories</b>	<b>85.71</b>	<b>2.35</b>
<b>PARTICIPATION IN DECISION-MAKING AND AUTHORITY</b>		
I have little chance/scope in contributing to decision making in my own department	93	2.43
I have little chance/scope in contributing to decision making at institutional level	88	2.37
Overall I have too little authority in my work	93	2.38
Most people here make up their own rules	59	1.60
<b>Percent within all categories</b>	<b>83.25</b>	<b>2.20</b>
<b>WORKLOAD</b>		
The faculty workload scheme is not uniformly implemented	90	2.46
I feel stressed because of the unrealistic deadlines	93	2.45
My administrative work affects my instructional work	65	1.97
There is less time for rest breaks at work	46	1.73
Job demands interfere with personal time	78	2.29
My workload leaves no time for research and extension	94	2.59
<b>Percent within all categories</b>	<b>77.67</b>	<b>2.25</b>
<b>WORKING CONDITION</b>		
There is not good air quality in the office	46	1.86
There is not enough light in the office	51	1.93
The office is not reasonably decorated	52	1.83
The office is not tidy and cleaned regularly	52	1.96
The office is not reasonably furnished	51	1.94
The office is noisy which distracts work	82	2.31
The office is overcrowded	89	2.27
There is a lack of instructional facilities in our department	86	2.24



There is no internet access in my department	93	2.20
There is a problem of favoritism in my department	94	2.39
<b>Percent within all categories</b>	<b>69.6</b>	<b>2.09</b>
<b>RELATIONS WITH COLLEAGUES</b>		
There is factionalism among the faculty	44	1.65
There is friction or anger between colleagues	75	2.11
I don't receive the respect at work place I deserve from my colleagues	87	2.17
there is interference from the boss and colleagues while performing my job	75	2.15
I am subject to personal harassment in the form of unkind words or behaviour	42	1.43
<b>Percent within all categories</b>	<b>64.6</b>	<b>1.90</b>
<b>TAWM</b>		<b>2.13</b>

It is remarkable that the teaching personnel of the Kalinga-Apayao state college show 'medium level of stress' despite the recent changes in the world affecting many organizations including higher education institutions. In 1996, the results of an international survey of academic professions which was carried out using data from 14 countries reported that significant changes had taken place in higher education (Altbach, 1996). These challenges will certainly have an impact on the well-being of employees at higher education institutions.

Seldin (1991) found that the levels of stress of lecturers, administrators as well as support personnel, including para-professionals, secretaries and custodial staff who contribute to the daily operations and success of a higher education institution have increased in recent years and are likely to get worse. This is relevant for Gorschkov (1998) accentuated that stable and productive support systems in terms of higher education and training are of vital importance to any country in order to ensure sustainable economic, social and political reconstruction and development.

Findings of other studies were similar to those shown in the current study, wherein, promotion, development, training opportunities and feedback issues had been shown to lead to high levels of stress in some jobs (Sharpley, 1997), simply because workers are disappointed when their efforts are not recognized (Nwadiani, 2006).

Teachers are valuable assets of any educational institution and they are responsible for the attraction of the external customers and increase the profitability of the institution.



Focusing on their needs and wants, would definitely increase their job satisfaction, performance and commitment and hence increase their output. It is always more expensive to recruit new teachers than keep the old ones (Daft, 2006). They could also serve as a base for achieving total quality management towards the attainment of university hood.

**Table 3.. Correlation analysis between the level of job stressors and the personal and professional characteristics of the faculty**

Variables	Critical Chi-Square Value	Computed Chi-Square Value	Interpretation
Age	.149	.129	Not Significant
Sex	2.008	.571	Not Significant
Education level	.223	.701	Significant
Civil Status	.125	.266	Significant
Status of appointment	.659	.883	Significant

Table 3 shows that the age, educational level, civil status, and status of appointment of the teaching personnel are significantly related to their level of stress. On the other hand, the level of stress of the respondents is not significantly related to their sex.

## CONCLUSIONS

Findings indicated that the employees suffered medium levels of job stress. However, the teaching personnel of the Kalinga-Apayao State College are highly affected by inadequate promotion opportunities and feedback. Surprisingly, the respondents registered medium levels of stress along role conflict and ambiguity, lack of participation in decision making, excessive workload, unsatisfactory working conditions and interpersonal relations.

The findings also determined that the age, educational level, civil status, and status of appointment of the teaching personnel are significantly related to their level of stress. On the other hand, the level of stress of the respondents is not significantly related to their sex.

## RECOMMENDATIONS

Stress affects the efficiency of the individual. So, there is a need to provide proper conducive environment and support to teachers to improve individual stress at the workplace. It is recommended that regular assessment of stress level should be conducted for preventive measures. Direct physiological measures of stress like diagnostic tests and consultation should be conducted by the Guidance Center and Medical Clinic. Besides that, the administration should check that, supervision, support and relationship with the



teachers is properly taken care of and enhanced most strongly. It is also suggested that workshops and seminars should be conducted to alleviate and cope with stress. It is further recommended that policies on promotions should be clearly and regularly disseminated not only to the academic personnel but also to the other employees of the state college.

Although the current study did not assess the effect of the stressors on the students themselves, such job stressors and their impact on the organizational performance of employees would eventually affect the students at the state college. The state college needs to elevate the situation and resolve all the factors affecting the employees which might help in reducing the costs incurred when the trained, well experienced employee and/or the student leave the organization.

## LITERATURE CITED

1. Ben-Bakr, K. A., Al-Shammari, I. S., & Jefri, O. A. 1995 Occupational stress in different organizations: A Saudi Arabian survey. *Journal of Managerial Psychology*, 10, 24-28. doi:10.1108/02683949510085956
2. Brown, Z. A., & Uehara, D. L. 2008 Coping with teacher stress: A research synthesis for Pacific education. URL (last checked 2 June 2013). <http://www.prel.org>
3. Carmeli, A., & Gefen, D. 2005 The relationship between work commitment models and employee withdrawal intentions. *Journal of Managerial Psychology*, 20, 63-86. doi:10.1108/02683940510579731
4. Chang, K., & Lu, L. 2007 Characteristics of organizational culture, stressors and wellbeing: The case of Taiwanese organizations. *Journal of Managerial Psychology*, 22, 549-568. doi:10.1108/02683940710778431
5. Chen, J. C., Silverthorne, C., & Hung, J. Y. 2006 Organization communication, job stress, organizational commitment, and job performance of accounting professionals in Taiwan and America. *Leadership & Organization Development Journal*, 27, 242-249.
6. Chevaillier, T. 2000 *The changing conditions of higher education teaching personnel*. Geneva: Working Paper at the Sectorial Activities Programme International Labour Office.
7. Conley, S., & Woosley, S. A. 2000 Teacher role stress, higher order needs and work outcomes. *Journal of Educational Administration*, 38, 179-201.



8. Daft, R. L. 2006 *The new era of management: International Edition*. Mason: South-Western Thomson.
9. Department of Labor. 2008 Occupational outlook handbook: Education administrators. URL (last check 2 August 2008). <http://www.bls.gov/home.htm>
10. deSmet, P., Sans, S., & Dramaix, M. 2005 Gender and regional differences in perceived job stress across Europe. *European Journal of Public Health*, 15, 536-545. doi:10.1093/eurpub/cki028
11. Dua, J. K. 1994 Job stressors and their effects on physical health, emotional health and job satisfaction in a university. *Journal of Educational Administration*, 32, 59-78.
12. Fairbrother, K., & Warn, J. 2003 Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*, 18, 8-21. doi:10.1108/02683940310459565
13. Fevre, M. L., Matheny, J., & Kolt, G. S. 2003 Eustress, distress, and interpretation in occupational stress. *Journal of Managerial Psychology*, 18, 726-744. doi:10.1108/02683940310502412
14. Fotinatos-Ventouratos, R., & Cooper, C. 2005 The role of gender and social class in work stress. *Journal of Managerial Psychology*, 20, 14-23. doi:10.1108/02683940510571612
15. Gmelch, W. H., & Burns, J. S. 1994 Sources of stress for academic department chairpersons. *Journal of Educational Administration*, 32, 79-94.
16. Herbert, J. 1997 Fortnightly review: Stress, the brain, and mental illness. *BMJ*, 315, 530-535. doi:10.1136/bmj.315.7107.530
17. Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. 2005 The experience of work-related stress across occupations. *Journal of Managerial Psychology*, 20, 178-187. doi:10.1108/02683940510579803
18. Kivimäki, M., Leino-Arjas, P., Luukkonen, R., Riihimäki, H., Vahtera, J. 2002 Work stress and risk of cardiovascular mortality: Prospective cohort study of industrial employees. *BMJ*, 325, 857-863. doi:10.1136/bmj.325.7369.857
19. Koustelios, A., Theodorakis, N., & Goulimaris, D. 2004 Role ambiguity, role conflict and job satisfaction among physical education