

Impact of Occupational Stress on Employees' Performance

(With Special Reference to Teaching Staff in State Universities in Eastern Province of Sri Lanka)

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Abstract

The objective of this study was to investigate the impact of occupational stress on employees' performance and to determine the major sources of occupational stress experienced by teaching staff in state universities in eastern province of Sri Lanka. To analyze this condition, one hypothesis was formulated using deductive approach. The study was conducted by using a random sample of 2 state universities in eastern province of Sri Lanka. Type of investigation was correlational and it was cross-sectional on time horizon. The unit of analysis was organizational level; each university. Academic staff served as respondents on behalf of the firm. Measures of the study were of good quality after assuring reliability and validity. Data were collected from 133 respondents which was 100% response rate. In order to test the hypothesis that was concerned with relationship between perceived degree occupational stress and perceived degree of employees' performance, the Pearson Product Moment Correlation technique was applied. The results of the study showed a significant and negative relationship between perceived degree occupational stress and perceived degree of employees' performance in the universities. The relationship was significant ($r = -.199, p = .022$) with employee performance.

Keywords: occupational stress, employees' performance, state universities in Eastern Province of Sri Lanka

Introduction

Socio-economic development of Sri Lanka heavily depends on success and progress of organizations, and Human Resource Management (HRM) which is one of the most important functional fields of Organizational Management (Serasinghe and Opatha, 2007). Universities train the nation's scientists and other professionals and produce much of its cutting-edge research (Winefield et al, 2008). Hence researchers understood that universities plays major role in providing the knowledge and expertise services through education required for the employees to be success in their organizations.

Academic work has traditionally been regarded as non-stressful, but recent evidence suggests that this is no longer the case. The university system is under strain and evidence to support this proposition is available both nationally and internationally (Winefield et al, 2008).

Restructuring of programs, changes in syllabi, rise of student enrolment, new educational policies, quality assurance procedures, increased use of short – term contracts, funding cuts, change of employee attitudes, advancements in information and education technology etc are the leading factors of change in higher education (Palagolla and Wickramasinghe, 2009). Sri Lankan university sector is changing rapidly as a result of educational reforms and the government's emphasis on a knowledge economy (Wijetunge and Pradeepa1, 2012). Hence it can be concluded that employees in Sri Lankan Universities or Higher Education Institutes are working with changing environment.

Over the past few decades stress is emerging as an increasing problem in organizations (Bashir and Ramay, 2010). Stress in general and work stress in particular is said to cause people and employees in all types of businesses and Industries. This is a universal problem almost every employee encounters with it (Usman et al, 2011). Work stress is one of the most widely researched areas in organizations worldwide. It consistently attracted researchers' attention because it has been shown to play a role in certain job related attitudes i.e. job satisfaction and organizational commitment; and behaviors such as employee turnover (Sager, 1994). The stress is a burning issue in modern society. Stress is a normal part of human life in the modern world (Fernanado, 2007). Stress is not necessarily bad in and of itself (Robbins, 2001). Some stress can be good, and some can be bad. Stress has a positive effect on employees of any organization but up to a certain extent up to which an employee can cope with it, mostly it exceeds the bearable limits and has a negative result on employees (Bashir and Ramay, 2010). There have been so many reports of worldwide workplace stress recently that it would be perfectly reasonable to conclude that everyone everywhere is depressed and dishearten. Every employee feels stress related to work (Dar et al, 2011).

There is research gap to do a study on the occupational stress and employees' performance in Sri Lankan state universities. In recent times, stress has become a major issue that has seriously affected academic staff tertiary institutions all over the world (Joseph et al, 2013). And also since the last two decades with the inflow of many private sector universities, higher education institutions are commonly labeled as stressful environments (Barkhuizen and Rothmann, 2008). It is necessary to correlate the occupational stress with performance of the employees since Al-Ahmadi (2009) described that employee performance is often examined in relation to stress and burnout.

Researchers found some studies carried out in Sri Lanka in respect of employees of Sri Lankan state universities. They are; Palagolla and Wickramasinghe, (2009) focused on 'Major causes and consequences of occupational stress among university academics in Sri Lanka'. Another research carried out by the researcher (Wickramanayake, 2010) focused on 'Information-seeking behavior of management and commerce faculty in Sri Lankan universities'. Another research is that, (Weerakoon, 2009) focused on 'Blurring Borders in Higher Education: Contribution of Academic Staff Development in Universities to Corporate Human Resource Development'. Another research carried out by the researcher (Gamage, 2005) focused on 'Assessment of Quality of Faculty in Humanities and Social Science in the Public University System in Sri Lanka'. Another research carried out by the researcher (Ileperuma, 2002), 'Information gathering behavior of arts scholars in Sri Lankan universities: a critical evaluation'. Further a research carried out by the researcher (Premakumara and Fan, 2009) focused on 'Correlates of Employee Satisfaction with Pay in the Sri Lankan University System'.

The above studies did not study the relationship between the occupational stress and employee performance in Sri Lankan state universities. For this study, teaching staff in state universities in Eastern Province of Sri Lanka such as Eastern University, Sri Lanka and South Eastern University of Sri Lanka were taken. Researchers interested to do this research proposing the following research question.

Does occupational stress significantly relate to performance of teaching staff in state universities in Eastern Province of Sri Lanka?

The objectives of the study is to examine the impact of occupational stress on performance of teaching staff in state universities in Eastern province of Sri Lanka; to determine the major sources of occupational stress experienced by teaching staff in state universities in Eastern province of Sri Lanka.

Research Framework

Occupational Stress: Organizational stress, or job stress, in simple terms can be defined as physical and emotional responses that occur when the requirements of the job do not match the capabilities and resources provided (Lo and Lamm, 2005). Dar et al (2011) defined that job stress occurs as a result of a poor person-environment fit. (NIOSH) National Institute of Occupational Safety and Health, (1999) and Jordan et al, (2003) defined that work stress as the harmful physical and emotional responses that occur when job requirements do not match the worker's capabilities, resources, and needs.

Regarding sources of occupational stress, researchers studied that there are different kinds of sources of stress explained by different authors, but Cartwright and Cooper, (1997) stated that much research in the field of workplace stress suggested six major sources of stress at work such as Factors Intrinsic to the job, Role in the organization, Relationships within the organization, Career development, Organizational structure and climate, Home and Work pressures. Researchers further studied the above sources in-depth to identify the key variables under each source. Hence researchers have taken the study of Cartwright and Cooper (1997) where they indicated that poor working conditions, shift work, long hours, travel, new technology, and work overload are the variables of factors intrinsic to the job. Ivancevich, and Matteson, (1980) as cited in Cartwright, & Cooper, (1997) stated that role ambiguity, role conflict, and the degree of responsibility are variables of role in the organization. According to Strank, (2005) relationship with boss, relationship with subordinates & colleagues, delegating responsibility, personality conflicts are the variables of relationships within the organization. Stranks (2006) described that promotion, job security, achievement of ambition, job status, payment for job are variables of career development. According to Stranks (2005) little or no participation in decision-making, restrictions on behavior, office politics and lack of effective consultation are variables of organizational structure and climate. (Rehman et al., 2012) indicated that more work demand interferes with family and flexible work arrangements are the variables of home and work pressures.

Employee Performance: Opatha (2002) indicated that job performance states how well an employee performs task, duties and responsibilities of his or her job. Putterill and Rohrer (1995) defined the job performance as it focuses directly on employee productivity by assessing the number of units of acceptable quality produced by an employee in a manufacturing environment, within a specific time period. Velnampy (2006) described that

performance is a function of two variables-Capacities for work (C) and will to work. i.e., Motivation (M). Yiing and Ahmad (2009) stated that employee performance is task and contextual behaviors of employees. Here task behavior is the behavior associated with maintaining and servicing an organization's technical core while contextual behavior is one's interpersonal skill, knowledge that support to broader social environment.

Regarding employee performance researchers considered the study of Opatha (2002) where he indicated that traits, behaviors, and results based information are key variable of employee performance as well. Opatha (2002) indicated that Trait-based information identifies a subjective character of the employee; behaviors are the ways that employee act in relation to the job; results are outcomes produced by the employee. Kottawatta, (2007) indicated that job knowledge, cooperation, dependability, interpersonal relations, communication skills are variables of trait-based information; planning work, organizing work, punctuality, attendance, speed are variables of behavior-based information; efficiency achievements, completion of work on schedule, quality of work are results-based information.

Finally, numerous researchers indicated that there is a relationship between occupational stress and employee performance (Stranks, 2005; Asawathappa, 2005; Eres, and Atanasosk, 2011; Davis and Newstrom, 1989; Park, 2007; Dar et al., 2011; Fernando and Selvam, 2010; Kayastha et al, 2012; Ghafoor Khan et al, 2011; LeBlanc, 2009; Motowidlo et al., 1986; Ida et al., 2009; Sundaram, and Kumaran, 2012; Smith, 2000; Reddy and Poornima, 2012; Fako, 2010; and Cartwright and Cooper, 1997).

Hence, following theoretical framework can be developed (see figure 1).

These finding stated that there is a strong relationship between occupational stress and employee performance. So according to these findings the following hypothesis was developed;

H1: There is a relationship between occupational stress and employees' performance

Figure: 1 presents the relevant schematic diagram. Occupational stress is labeled as the independent variable and perceived employees' performance is labeled as the dependent variable.



Figure 1: Schematic Diagram of Theoretical Framework

Method

This study was a co-relational study carried out to determine whether there is a relationship between occupational stress and employees' performance. This research was a primary survey through a self-administered questionnaire in English, where the questionnaire was developed based on the operationalization of variables and consisted of 24 questions related to occupational stress and then, 20 questions related to employees' performance. This questionnaire was directly distributed to the selected sample of teaching staff.

Study Sampling Procedure

In Sri Lanka there are 15 state universities which can be categorized according to the provinces. The researchers selected the state universities in the Eastern Province such as Eastern University, Sri Lanka and South Eastern University of Sri Lanka. The total teaching staff of SEUSL is 120 out of which 64 are Senior Lecturers and 56 are Lecturers/ Lecturer Probationary. The total teaching staff of EUSL is 146 out of which 81 are Senior Lecturers and 65 are Lecturers/ Lecturer Probationary. Table -1 shows the composition of the population. The sample size was calculated as a random selection of the sample containing 50% from the total population in both universities.

Table 1 : Composition of the Population

Universities	Types of Teaching staff				Total
	Professors	Associate Professors	Senior Lecturers	Lecturers/ Lecturers (Probationary)	
SEUSL	0	0	64	56	120
EUSL	0	0	81	65	146
Total	0	0	145	121	266

(Source: Survey data)

Table-2 Sample selection

University	Total	Random sampling (50%)	Respondents
SEUSL	120	60	60
EUSL	146	73	73
Total	266	133	133

(Source: Survey data)

Therefore, the structured questionnaire was developed and distributed among selected sample (60 for SEUSL and 73 for EUSL). Table -2 shows the sample selection.

Measures

Occupational Stress

Occupational Stress was operationalized into six major dimensions such as Factors Intrinsic to the job, Role in the organization, Relationships within the organization, Career development, Organizational structure and climate, Home and Work pressures. The questionnaire assesses dimensions of Occupational Stress and employee performance. The 24 question items are divided into 6 factors: Factors Intrinsic to the job, Role in the organization, Relationships within the organization, Career development, Organizational structure and climate, Home and Work pressures. A 5-point Likert scale is used to evaluate answers.

Employee Performance

The perceived degree of employee past performance was operationalized into three dimensions such as Trait-based information, Behavior-based information, Result based information (Opatha, 2002; Kottawatta, 2007). A questionnaire was developed to measure the variable of

employee performance and it has 20 question items. The 20 question items were divided into three factors: traits, behaviours and results. A 5- point Likert scale was used to evaluate the answers.

Techniques of Data Analysis

As soon as the collection of data was completed through questionnaire survey, each questionnaire was carefully scrutinized and confirmed that all the questionnaires received back had been filled properly. All returned questionnaires were transferred to worksheets by assigning with scores. A 5-point Likert scale was used to evaluate the answers. After assigned these numerical values to each question they were transferred to worksheets. Then they were checked for accuracy and fed to the computer for performing statistical analysis with Statistical Package for Social Science (SPSS). The data analysis of this study involved two types of analyses i.e., Univariate analysis (involving one variable at a time) and Bivariate analysis (involving two variables at a time). Under Univariate analysis descriptive statistical techniques were used such as frequencies, central tendencies and dispersions of the dependent and independent variables. By using frequency distribution it was analyzed how the responses were spread or distributed in the various subcategories of each variable. The central tendencies of the data sets of the dependent variable and the independent variables were measured by computing the means of the response categories. The standard deviation was calculated to measure the dispersions of the datasets of the dependent and independent variables.

Since this study involved two variables, it is important to know how one variable is related to another beyond knowing the mean and the standard deviations of the dependent and independent variables. One of the objectives of the study is to find out how the dependent variable is influenced by the independent variable. Bivariate analysis (involving two variables at a time) was done to see how the dependent variable is associated with the independent variables. Hence, Pearson correlation coefficient was used by the researchers to reveal the strength of two variables for interval scale.

Data Analysis Tools

The data were analyzed using SPSS 16.0 version and MS Excel 2010.

Reliability and Validity

Information about validity and reliability were necessary in order to determine whether instruments were stable and accurate and whether they truly measure what they set at to measure (Sekaran, 2003). Validity measure the truthfulness of measuring instruments. It indicates whether the instrument measures what it claims to measure (Jackson, 2003). The researchers made a careful attempt in constructing the instrument to consider what the phenomena were being studied, what the research objectives were, what the hypotheses formulated were and what the indicators which had been devised for the two variables. Consequently, the instrument provided an adequate coverage of the phenomenon of occupational stress and employees' performance. The questionnaire was developed with an adequate coverage by comprising an adequate number of items (or questions) that represents variables of interest, ensuring the content validity of the instrument. Hypotheses were formulated based on these variables and dimensions or elements were developed by operationalizing the variables. Therefore, the questions developed for this study has content validity as the questionnaire was estimated by embodying sufficient number of question items related to all the variables of interest in the present study.

A pilot study was conducted using 10 teaching staff at EUSL and 10 teaching staff at SEUSL to find the reliability of the questionnaire. According to Sekaran, (2003) reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure. To test the reliability of the questionnaire the interim consistency reliability was used. According to Sekaran, (2003) the most popular test of inter item consistency reliability is the Cronbach's coefficient alpha. In this study, the Cronbach's coefficient alpha were more than 0.70 for all the factors studied and therefore reliability was assured.

Results

In this analysis the level of existence or degree of occurrence or level of each variable in the sample is analyzed in terms of degree of responses given by the respondents with the help of descriptive statistics. The researchers used the Mean and Standard deviation as the measures of this analysis. Researchers measured the Mean and Standard for six components of occupational stress (*factors intrinsic to the job, the individual's role in the organization, career development, relationships at work, the organizational structure and climate and home: work pressures*) and employee performance. These two statistics were used to analyze the level of existence or disagree of occurrence of each variable in the entire sample by placing them in five – point likert scale for each variable describing the level of existence or the degree of occurrence. The responses for each question were provided scores ranging from 1-5 (1-Strongly disagree, 2- disagree, 3-Neutral, 4- Agree, 5-Strongly agree).

Based on the result of Univariate analysis, the systematic level of each variable of occupational stress and performance of teaching staff are shown in table 3 below.

Table 3: Results of Measurement of Occupational Stress and Performance of Teaching staff

Variables	Mean	Standard deviation	Level
Occupational Stress	2.8008	.68975	Low
Employee performance	4.2906	.37351	High
Factors intrinsic to the job	3.3847	.74550	Moderate
Role in the organization	3.1075	.85445	Moderate
Relationship within organization	2.6316	1.13925	Low
Career development	2.0180	.79103	Low
Organizational structure and climate	2.7162	1.07387	Low
Home and work pressures	3.0526	1.22824	Moderate

(Source: SPSS Output Data)

By using the correlation analysis between the independent and dependent variables, the hypothesis formulated was tested in this section. In an attempt to investigate whether occupational stress is significantly related to employee performance, correlation analysis was performed. Based on the result of Bivariate analysis, the relationship between occupational stress and performance of teaching staff is shown in table 4 below.

Table 4: Results of Measurement of Relationship between Occupational Stress and Performance of Teaching Staff

Variables	Correlation (<i>r</i>)	<i>P</i> value
Occupational Stress and Employee Performance	-.199*	.022

(Source: SPSS Output Data)

As shown in Table: 4, occupational stress was found to significantly correlate with employee performance ($r = -.199, p = .022$), implying that there is weak negative relationship between occupational stress and employee performance. Hence H_1 of main hypothesis is accepted.

Implications of the study

According to the fundamental research problem, this study was focused to achieve the objectives of examine the impact of occupational stress on performance of teaching staff in state universities in Eastern province of Sri Lanka; to determine the major sources of occupational stress experienced by teaching staff in state universities in Eastern province of Sri Lanka. Based on the identification of factors affecting the occupational stress in general, six factors were selected to be affecting the occupational stress of teaching staff in state universities in Eastern province of Sri Lanka. These factors were considered to analyze the occupational stress of teaching staff in state universities in Eastern province of Sri Lanka

To depict the direction of the relationship between independent variable of occupational stress with the dependent variable of employees' performance, a schematic diagram was developed. The relationship of the variables was analyzed by testing one hypothesis by using bivariate analysis. In the data analysis, it was found that occupational stress was low and the employees' performance was high. Therefore, the respective top management must give higher attention to reduce the occupational stress further to increase the employees' performance to the very high extent in future.

Further, the results of this study show that major sources of occupational stress experienced by teaching staff are Factors intrinsic to the job, Home & work pressures and Role in the organization. The other three sources such as relationship within organization, career development and organizational structure and climate are in low level.

Suggestions for Further Studies

This research study considered only two state universities in Eastern Province. This can be extended to all state universities in Sri Lanka. Further this research studied impact occupational stress on employee performance. Therefore there is gap to do the research covering all state universities in Sri Lanka or by considering the impact other factors on performance of teaching staff.

Discussion

Primary objective of this study is to examine the impact of occupational stress on performance of teaching staff. The results of this study show that occupational stress has significant and negative weak impact ($r = -.199, p = .022$) on performance of teaching staff in state universities in Eastern province of Sri Lanka. The sub objective of this study is to determine the major

sources of occupational stress experienced by teaching staff. The results of this study show that major sources of occupational stress experienced by teaching staff are Factors intrinsic to the job, Home & work pressures and Role in the organization. The other three sources such as relationship within organization, career development and organizational structure and climate are in low level.

The weak correlation between occupational stress and employee performance clearly shows that performance of teaching staff cannot be highly affected by occupational stress. However, there is a weak relationship between occupational stress and employee performance; there is a possibility to increase the performance of teaching staff to very high level by reducing the occupational stress. Therefore, an effort may be taken by the university administration to reduce the occupational stress further. It is better to maintain the improvement in the elements such as factors intrinsic to the job, role in the organization and home & work pressures in order to reduce the occupational stress for teaching staff since the Mean and Standard Deviation of these elements show that there is a possibility to increase the occupational stress from moderate level to high level by these three elements.

References

- Al-Ahmadi, H. (2009), 'Factors Affecting Performance of Hospital Nurses in Riyadh Region, Saudi Arabia', *International Journal of Health Care Quality Assurance*, 22(1), 40-54.
- Aswathappa, K. (2005), *Safety and Health, Human Resource and Personal Management*, 4th Edition, 487-491, Published by McGraw-Hill Companies, Inc. New Delhi.
- Barkhuizen, N., & Rothmann, S. (2008), 'Occupational stress of academic staff in South African higher education institutions', *SA Journal of Psychology*, 321-336.
- Bashir, U., & Ramay, M.I. (2010), 'Impact of Stress on Employees Job Performance A Study on Banking Sector of Pakistan', *International Journal of Marketing Studies*, 2 (1), 122-126.
- Cartwright, S. & Cooper, C. (1997), *Managing workplace stress*, New Delhi, 04-21, Sage Publications.
- Dar, B.L., Akmal, A., Naseem, M. A., and Khan, K. D. (2011), 'Impact of Stress on Employees Job Performance in Business Sector of Pakistan', *Global Journal of Management and Business Research*, 11(6), 01-04.
- Davis, K. & Newstrom, J. W. (1989), *Stress and Counseling, Human behavior at work-Organizational Behavior*, 8th Edition, 485-490, Published by McGraw-Hill companies, Inc.
- Eres, F. & Atanasoska, T. (2011), 'Occupational Stress of Teachers: A Comparative Study Between Turkey and Macedonia', *International Journal of Humanities and Social Science*, 1(7), 59-65.
- Fako, T.T. (2010), 'Occupational Stress among University Employees in Botswana', *European Journal of Social Sciences*, 15(3), 313-326.
- Fernando, W.R.P.K. and Selvam, M. (2010), 'Exhaustion and Stress: An Empirical Study among Workers in Apparel Industry of Sri Lanka', *ICBI - University of Kelaniya, Sri Lanka*, 1-12.
- Fernando, W.R.P.K. (2007), 'Organizational Degradation due to Stress: An empirical study in Sri Lankan Private Sector Commercial Banks', *Kelaniya Journal of Human Resource Management*, 2(2).
- Gamage, S.N. (2005), 'An assessment of Quality of Faculty in Humanities and Social Science in the Public University

- System in Sri Lanka',
The Journal of the University Librarians Association of Sri Lanka, 9, 1-11.
- Ghafoor Khan, R. A., Ahmad Khan, F., Aslam Khan, M., and Shakeel, M. (2011), 'Impact of flexible scheduling on employee performance regarding stress and work-family conflict', *Far East Journal of Psychology and Business*, 4(3), 01-14.
- Ida, I., Miura, M., Komoda, M., Yakura, N., Mano, T., Hamaguchi, T., Yamazaki, Y., Kato, K., and Yamauchi. K. (2009), 'Relationship between stress and performance in a Japanese nursing organization', *International Journal of Health Care Quality Assurance*, 22(6), 642-657.
- Ileperuma, S. (2002), 'Information gathering behaviour of arts scholars in Sri Lankan universities: a critical evaluation', *Collection Building*, 21(1), 22 – 31.
- Jackson, S.L. (2003), *Getting Started: Defining, Measuring and Manipulating Variables*, *Research Methods and Statistics: A critical Thinking approach*, 25-48.
- Jordan, J., Gurr, E., Tinline, G., Giga, S., Faragher, B., and Cooper, C. (2003), 'Beacons of excellence in stress prevention', *Research Report*, 01-186, Prepared by Robertson Cooper Ltd and UMIST for the Health and Safety Executive.
- Joseph, U. K. Esther, U. S., and Lucy, U. A. (2013), 'A Critical Analysis of Career Stress Among Academic Staff of Tertiary Institutions in Cross River State', *Journal of Educational and Social Research*, Vol. 3 (2)
- Kayastha, R., Adhikary, P.R., and Krishnamurthy, V. (2012), 'Occupational Stress among Managers: A Nepalese Survey'. *Academic Research International*, 585-590.
- Kottawatta, K. H. H. (2007), 'Impact of Attitudinal Factors on Job Performance of Executives and Non-Executive Employees in Apparel Industry in Sri Lanka', *Sri Lankan Journal of Human Resource Management*, 1(1), 53-70.
- LeBlanc, V.R. (2009), 'The Effects of Acute Stress on Performance: Implications for Health Professions Education', *Academic Medicine*, 84(10), 525-533.
- Lo, K. & Lamm, F. (2005), 'Occupational Stress in the Hospitality Industry-An Employment Relations Perspective', *New Zealand Journal of Employment Relations*, 30(1), 23-25.
- Motowidlo, S.J. Packard, J.S., and Manning, M.R. (1986), *Occupational Stress: Its Causes and Consequences for Job Performance*, *Journal of Applied Psychology*, 71(4,) 618-629.
- National Institute for Occupational Safety and Health (NIOSH), (1999), 'Stress...at Work', Centers for Disease Control and Prevention, U. S. Department of Health and Human Services, Publication no. 99-101, 26.
- Opatha, H.H.D.N.P. (2002), *Performance Evaluation of Human Resource*, 1st Edition, 2-12, 170-183, Colombo, Sri Lanka: the Author publication.
- Palagolla, W.W.N.C.K., & Wickramasinghe, V. (2009), Major causes and consequences of occupational stress among university academics in Sri Lanka, *Proceedings of 4th International Research Conference on Management and Finance*, University of Colombo, pp.633-643.
- Park, J. (2007), *Work stress and job performance*, *Statistics Canada*, 5-17.
- Premakumara, L. and Fan, L. (2009), 'Correlates of Employee Satisfaction with Pay in the Sri Lankan University System', *Proceedings of 4th International Research Conference on Management and Finance*, University of Colombo, 595-601.
- Putterill, M. S. & Rohrer, T. C. (1995), 'A causal model of employee commitment in a manufacturing setting', *International Journal of Manpower*, 16(5/6) 56-69.

- Reddy & Poornima. (2012), 'Occupational Stress and Professional Burnout of University Teachers in South India', *International Journal of Educational Planning & Administration*, 2(2), 109-124.
- Rehman, M.U. Irum, R. Tahir, N. Ijaz, Z. Noor, U. and Salma, U. (2012), 'The Impact of Job Stress on Employee Job Satisfaction: A Study on Private Colleges of Pakistan', *Journal of Business Studies Quarterly*, 3(3), 50-56.
- Robbins, S.P., (2001), 'Organizational Change and Stress Management, *Organizational Behavior*', 9th Edition, 538-572.
- Sager, J.K. (1994), 'A structural model depicting salespeople's job stress', *Journal of the Academy of Marketing Science*, 22(1), 74-84.
- Sekaran, U. (2003), 'The Research process, *Research Methods for Business: A Skill Building Approach*', 4th Edition, 54-138, Published by John Wiley & Sons, Inc.
- Serasinghe, D.K.S. & Opatha, H.H.D.N.P. (2007), 'Human Resource Management Practices in Listed Firms in Sri Lanka', *Sri Lankan Journal of Human Resource Management*, Vol. 1, No.1, pp. 36-52.
- Smith, A. (2000), 'The scale of perceived occupational stress', *Occup. Med*, 50(5), 294-298.
- Stranks, J. (2005), 'Stress at Work: Management and Prevention', 01-125, *British Library Cataloguing in Publication Data*.
- Stranks, J. (2006), *Stress at Work, The Manager's Guide to Health & Safety at Work*, 8th Edition, 156-173, *British Library Cataloguing in Publication Data*.
- Sundaram, M.S. & Kumaran, M.J. (2012), 'A Study on Occupational stress and Coping strategies among Police Head Constables (Grade III)', *Research Journal of Management Sciences*, 1(1), 44-47.
- Usman, A. Ahmed, Z. Ahmed, I. and Akbar, Z. (2011), 'Work Stress Experienced by the Teaching Staff of University of the Punjab, Pakistan: Antecedents and Consequences', *International Journal of Business and Social Science*, 2(8), 202-210.
- Velnamby, T. (2006), 'Performance and its impact on Organizational Commitment: A comparative study of state and private sector banks in Sri Lanka', *Journal of Management*, October, IV(1), 19-25.
- Weerakoon, Y. M. S. K. (2009), 'Blurring Borders in Higher Education: Contribution of Academic Staff Development in Universities to Corporate Human Resource Development', *Proceedings of 4th International Research Conference on Management and Finance*, Faculty of Management and Finance, University of Colombo, Sri Lanka, December 11, 520-528.
- Wickramanayake, L. (2010), 'Information-seeking behavior of management and commerce faculty in Sri Lankan universities: An evaluation', *Library Review*, 59(8), 624-636.
- Wijetunge & Pradeepal. (2012), 'Work-related Stress among the University Librarians of Sri Lanka', *Journal of the University Librarians Association, Sri Lanka*, 16(1), 83-95.
- Winefield, T. Boyd, C. Saebel, J., and Pignata, S. (2008), 'Update on National University Stress Survey', *Australian Universities Review*, vol. 50, no. 1
- Yiing, L. H. & Ahmad, K.Z.B. (2009), 'The Moderating Effects of Organizational Culture on the Relationships Between Leadership Behavior and Organizational Commitment and Between Organizational Commitment and Job Satisfaction and Performance', *Leadership & Organization Development Journal*, 30(1), 53-86.