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Occupational Stress and Job Burnout among Primary and Secondary School Teachers in Cuttack, Orissa, 2013

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ABSTRACT

The purpose of this study was to explore the levels of occupational stress and job burnout among teachers working in primary and secondary schools and identify the relationship between the selected demographic data with the stress levels. The sample consisted of 100 teachers from 4 schools in Cuttack, Orissa. The instruments used to measure the variables were: 1.Headington Stress Index questionnaire, 2.Headingtacon Burnout Inventory, 3. Self care and Lifestyle Balance Inventory. The statistical techniques of descriptive statistics, ANOVA analysis and Pearson's coefficient were employed to analyze the data. The findings of the study indicated that a major portion of the teachers' population faced moderately low stress and burnout, and the remaining faced moderately high stress and burnout. Younger teachers are reported to have more stress than the older teachers. Higher the burnout among teachers, lower was the lifestyle balance among them. Experience, gender and grade did not affect the stress levels among teachers.

Keywords: Occupational Stress, Job Burnout, Primary and Secondary School Teachers,

"Work is love made visible. And if you cannot work with love but only with distaste, it is better that you should leave your work..." ~ Kahlil Gibran

The profession of teaching used to be regarded labor of love until now. But many realities of classroom life have made teaching a stressful occupation. As a consequence, many teachers are finding that their feelings about themselves, their students and their profession are more negative than they were initially. These teachers are susceptible to developing chronic feelings of emotional exhaustion and fatigue, negative attitudes towards their students and a loss of feeling of accomplishment in the job.

Teaching is considered a highly stressful occupation. Burnout is a negative affective response occurring as a result of chronic work stress. For centuries, teaching has been characterized as a profession that is "emotionally taxing and potentially frustrating" (Lambert, O'Donnell, Kusherman, & McCarthy, 2006). The rate at which teachers leave the profession is significantly higher than the departure rate in other professions (Minarik, Thornton, &

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Perreault, 2003). Ingersoll (2002) reports the departure rate in non-teaching professions remains around 11% each year. This percentage is lower than the over 16% of public school teachers that leave the profession or change schools each year (Cox, Parmer, Tourkin, Warner, & Lyter, 2007). The departure rate of novice teachers is even higher. The number of teachers who leave the profession within the first five years can range from one third to one half (Hanushek, 2007; Ingersoll, & Smith, 2003).

Freudenberger (1977) describes burnout as physical and emotional exhaustion resulting from excessive demands on energy, strength or resources. He says that when frustration, tension or anxiety persist or increase, stress develops into a syndrome labeled as burnout. He also noted that sometimes burnt out people do not see themselves as cynical and depressed. They find fault with everything and everyone around them, complaining about the organization and reacting critically to whatever is suggested by others. Hindrickson (1979) points out that a burnt out teacher is losing or has lost the energy and enthusiasm needed to teach children.

Studies have shown that teaching is a stressful career and this can lead to teachers suffering from burnout (McCarthy, Lambert, O'Donnell, & Melendres, 2009), resulting in a national epidemic of teacher departures. Stressed teachers had more illness, medicine intake, anxiety, depression, and sexual passivity. More psychological and psychosomatic symptoms were reported by teachers experiencing high burnout (Bauer et al., 2006). Teacher burnout has an additional impact on the society, in that the teacher's state of mental health has a direct influence on the educational process. How the teacher instructs has more relevance than what is taught. A teacher who is low on morale, high on frustration and is detached from the students obviously is not able to be effective in the classroom.

Burnout is not a trivial problem but an important barometer of a major social dysfunction in the work place. Therefore in this study I have strived to find out the stress levels and professional burnout experienced by the school teachers in Cuttack and also those factors affecting these stress levels. This paper also delves into this problem and attempts to find adequate predictors of teacher stress and burnout within primary and secondary level teachers. As a researcher I feel this research could, in turn, help alleviate the number of teachers fleeing the profession by informing and guiding future studies on determining specific solutions to relieve stress and burnout.

CONCEPT OF STRESS

Stress is experienced by all in their everyday lives, in a wide variety of situations and settings. It is a natural and unavoidable feature of life experienced at one time or another by the vast majority of those engaged in professional work. Generally we agreed that stress is not just a uni-dimensional phenomenon. From whatever perspective we may view stress, is not limited to any particular sphere of an individual's life as it ranges from stressors present in his personal to his work life. Sanders (1983) concluded that although stress has become a part of our daily vocabulary but there exist considerable divergence among the various fields in which the concept is used with regard to its definitions and connotation. Stress is basically, a word derived from the Latin word "Stringer" meaning to draw tight. The definitions of stress are many and varied, ranging from simple one word statement such as tension or pressure to medical explanations for the physiological response of the human body to certain stimuli. Ivancevich and Matteson (1996) found that stress has different meanings to different people.

From a lay person's perspective, stress can variously be described as feeling tense, anxious, worried, or having the blues. Scientifically these feelings are manifestations of the stress experienced an intriguingly complex programmed response to the perceived threat that can have both positive and negative results. There is general consensus however, that stress is a physical, mental or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures and similar stimuli.

As commonly understood, stress is a pattern of disruptive, physiological and psychological reactions to events that threaten a person's ability to cope.

Wolf and Goodell (1968) defined stress as a dynamic state within an organism in response to a demand for adaptation.

Selye (1956) stress is "any external event or internal drive which threatens to upset the organismic equilibrium"

McGrath (1970) defined stress as a perceived imbalance between demand and response capacity under conditions where failure to meet demand has important consequences.

Cofer and Appley (1964) defined stress as a state of an organism where he perceives that his wellbeing is endangered and that he must direct all his energies to its protection. Cox (1978) has described three classes of definitions. Stress can be variously thought of as a response, i.e. the stress response to an extreme stimulus; as a stimulus i.e. as the stressor itself as an intervening variable.

Spielberger (1979) defined stress in two different ways. According to him, it is a dangerous potentiality, harmful/unpleasant external situation/conditions (stressors) that produce stress reaction; and secondly to the internal thought, judgment, emotional state and physiological process that are evoked by stressful stimuli. Ryhal and Singh (1996) stated that stress is the state of an organism it perceived that its well-being is endangered and that it must direct all its energies to its protection.

TYPES OF STRESS

There are different types of stress, good and bad. Most people think that stress is always bad. Nothing can be far from truth! A little stress is absolutely necessary for our survival in this highly competitive world! Thus, we can classify stress into two groups the good stress or 'eustress' or the bad stress or 'distress'

Eustress is the good stress which helps us to improve our performance. For example, if there is no stress of performing well in the exams or athletic events, students will not study harder or the athletes will not sweat it out on the tracks. A certain amount of positive stress keeps us pepped up to meet all challenges and is necessary for our survival and progress in life.

When stress gets out of hand, it becomes bad stress or distress, which will bring out the weakness within us and make us vulnerable to fatigue and illness. If distress is continued unchecked, this will lead to all the ill effects of stress.

The research literature acknowledges difficulty in pinpointing a single definition of the term stress. A frequently cited definition of stress has been provided by Selye (1974): "the

nonspecific response of the body to any demand made upon it". The term has been further defined by Gold and Roth (1993): "a condition of disequilibrium within the intellectual, emotional and physical state of the individual; it is generated by one's perceptions of a situation, which result in physical and emotional reactions. It can be either positive or negative, depending upon one's interpretations"

Faculty stress is defined by Kyriacou (1987) as "the experience by a faculty of unpleasant emotions, such as tension, frustration, anxiety, anger, and depression, resulting from aspects of work as a faculty". Faculty burnout is defined by Kyriacou (1987) as "the syndrome resulting from prolonged faculty stress, primarily characterized by physical, emotional and attitudinal exhaustion". While there are many different occupations in the education sector, teaching is identified as a particularly stressful job (Smith et al, 2000). Stress among teachers is a contributor to illness as well as a cause for some leaving the profession (Aitken 2002, cited in Verdugo and Vere). A German study ranked the teaching professions as the occupations at highest risk of poor mental health, with teachers in schools for pupils with disabilities and those engaged in the complementary education of apprentices most at risk (Hasselhorn and Nübling 2004).

In the education sector, work-related stress should be tackled at source, with a comprehensive strategy that: identifies possible sources of work-related stress, and their underlying causes (whether the work environment, how the work is organized, or the behavior of colleagues, students, or parents); examines the potential impact of work-related stress; works with the employees to identify and develop targeted solutions; works with the staff to implement those solutions and monitor their effectiveness.

THEORETICAL MODELS OF WORKPLACE STRESS

Karasek 's Demands-Control Model

A popular model to evaluate occupational stress is Demands-Control model presented by Karasek (1979). This approach posits that the most stressful situation in the workplace are those in which employee face heavy job demand but at the same time, are given little control over their work. This model gauges strain (stress) by the interaction of work pressures and demands and the decision latitude (control) of the worker. Thus, a job with very high demands and little to no control in decision making would be stressful-this happening is called the 'strain hypothesis'.

Demands refer to pressures to work hard or fast, excessive workloads, and conflicting priorities or responsibilities, and decision latitude, or control, concerns the worker's ability to control his or her work activities, including the authority to make decisions on the job (decision authority) and to select appropriate strategies to accomplish the job (skill discretion). Conversely, an individual presented with high demands and high control does not experience occupational stress; the pressure of high demands is negated or buffered by the element of control-this happening is called the 'buffering hypothesis.' Finally, research based on Karasek's Demand-Control model has found the lowest level of psychological well-being (i.e., the most stressed employees) exists among those workers experiencing high demands, low control, and low support (Schaubroeck & Ganster, 1991).

The Person-Environment Fit Model

One of the earlier and most well cited models is the Person-Environment fit model. This approach can be traced back to Kurt Lewin and his notion of interactional Psychology. Lewin

(1947) believed that human behavior is a function of an interaction between characteristics of the person and characteristics of the situation. One aspect of this interaction relevant to occupational stress is the degree to which there is a fit between the person and the situation. According to this theory, an employee perceives the work environment as stressful when there is a lack of fit between the person and his work environment. Occupational stress or strain results from interaction of an employee and his or her workplace; in other words, the degree of fit between a worker and his or her job determines the existence of job stress. Two types of interaction, or degrees of fit, are explored when assessing occupational stress: 1) the relationship between outcomes provided by the job and the needs, motives, or preferences of the individual, and 2) the relationship between the demands and requirements of the job and the skills and abilities of the worker. Application of the Person-Environment fit theory to the study of occupational stress has spurred the creation of numerous, related measures of job characteristics, individual traits, and job satisfaction (Schaubroeck & Ganster, 1991).

Siegrist's Effort-Reward Imbalance Model

Another approach to work stress, known as the Siegrist's Effort-Reward Imbalance model, suggests that occupational stress occurs when there is no reciprocation between the effort the worker puts in the job and the rewards he or she receives (Vagg & Spielberger, as cited in Rittmayer, 2001). Hence, in accordance with this model employee who is dissatisfied or under-appreciated are more likely to feel stressed. Application of this model requires exploration of both management style and individual personality characteristics {e.g., affectivity).

Lazarus's Transaction Model

This model proposed that stress is a relationship between the person and the environment that is appraised by the person as relevant to his or her well-being and in which the person's resources are taxed or exceeded (Lazarus & Folkman, 1984). This model identifies stressful conditions and how the stressors are cognitively appraised by the individual (i.e., Are the stressors viewed as threatening? Do the stressors produce negative responses?). It also takes into account individuals' coping resources. For example, workers differ in the number of duties and deadlines they can successfully juggle at one time-some might be overwhelmed by four concurrent tasks whereas others can balance ten. The capabilities and resources an individual draws from determine the perceived amount of stress.

Beehr and Newman's Facet model

Beehr and Newman (1978) proposed a model of the work stress process, According to this approach, occupational stress can be broken down into a number of "facets" that represent categories of variables to be studied. The first facet is personal facet, it refers to stable characteristics that employees bring with them to the workplace e.g., demographic characteristics and personality etc. the other facet, environmental facet refers to those stimuli which are present in the environment and employees must confront with them e.g., characteristics of work performed (such as complexity) and nature of job related interpersonal relations. Next is process facet that refers to the interaction of characteristics of person and characteristics of the situation. This is the point where a person perceive work environment as stressful or not. After the environment is perceived as stressful, there may be a variety of consequences for both the individual and the organization as well. The final facet is time facet, which exhibit that the process of individuals' perception of stressor in the environment are embedded with temporal context.

Source - http://www.euroasiapub.org/IJRIM/Dec2011/11.pdf pages: 5-7

BACKGROUND

Maslach (1984) defined burnout as the loss of concern for the people with whom one is working. Further, she explained burnout as the syndrome of emotional exhaustion and cynicism that results from interpersonal contact. She states that for the people who work continuously with other people, long term stress can be emotionally draining and can lead to burnout. They are usually required to work intensely and intimately with people on a large scale, continuous basis and become involved with their client's psychological, social and physical problems. This type of professional interaction arouses strong feelings of emotional and physical stress that can be disruptive and incapacitating. This may lead to defense in the form of 'detached concern' - of establishing some psychological distance from the client while still maintaining a concern for the person's wellbeing. Inability to develop this attitude and a lack of preparation for coping may make him/her unable to maintain the enthusiasm, care and commitment he/she initially brought to the job and then the process of burnout begins. A subsequent part is, the development of negative, cynical and dehumanized perceptions of and feelings about one's client and they are treated accordingly (depersonalization). Such negative reactions to clients however are not an inevitable consequence of emotional exhaustion, although they are quite prevalent. A third aspect of the burnout syndrome is the tendency to evaluate oneself negatively, particularly in regard to one's work and clients. People in this dimension of burnout feel unhappy about themselves and dissatisfied with their accomplishments. Thus, burnout is seen as a syndrome of emotional exhaustion, depersonalization and lack of personal accomplishment.

Burnout occurs at the individual level. It involves feelings, motives, attitudes and expectations. It is a negative feeling for the individual that leads to exhaustion (both physical and emotional), a feeling of lack of energy, a tendency to view the individuals in a disinterested manner (depersonalization) and the perception of a lack of personal achievement. The individual undergoing burnout may eat alone instead of taking his/her lunch with others, thereby avoiding mixing with others. The individual may even respond with cynicism to others. Maslach and Collins (1977) state that, "a worker becomes a petty bureaucrat, going strictly by the book and viewing clients as cases, rather than as people".

Teachers belong to a profession which involved working with students. Thus, they belong to the group of those who do 'people work' of some kind. Clouse and Whitekar (1981) point out three stages of teacher burnout:

Stage 1- Loss of Enthusiasm

Most teachers enter the profession with a sincere desire to help the students. Their energy levels may be high, ideals strong, value systems decent, sense of motivation high and they nurse an inner hope that something positive can be done about the students. However, when their expectations are not met, their enthusiasm falters.

Stage 2- Frustration

Frustration is one of the earliest signs of burnout. Lowered teacher morale at this point increases the frustration and burnout level.

Stage 3- Alienation

Alienation of the professional from the work environment may be viewed as a response or result of powerlessness, frustration and loss of meaning in one's work. Alienation is associated with detachment, withdrawal and isolation within the work environment. A teacher at this stage may view students as impersonal objects, may not be available when the students need help or even refuse to help them. Thus, a teacher who is undergoing burnout

would perceive a lack of enthusiasm, lowered sense of morale and high levels of frustration, a sense of detachment and would withdraw from work.

Thus we can consider teaching to be a highly stressful occupation resulting in many teachers experiencing professional burnout because of chronic work stress. As I come from a family background where maximum of them are in the profession of teaching, I thought this could be one important issue from my domain for the project work.

REVIEW OF LITERATURE

Literature related to Occupational Stress

The amount and degree of occupational stress a teacher experiences may be related to his negative self-perception, negative life experiences, low morale, and the struggle to maintain personal values and standards in the classroom (Worrall & May, 1989), while the extent to which a teacher perceives and experiences occupational stress in any school situation likely depends upon the appraisal of demands and the teacher's coping mechanism to deal with them. Kyriacou (2001) stated, "The stress experienced by a particular teacher will be unique to him or her, and will depend on the precise complex interaction between his or her personalities, values, skills, and circumstances"

Upadhyay and Singh (1999) compared the level of occupational stress experienced by the 20 college teachers and 20 executives. The executives showed significant higher levels of stress than college teachers on role over load, role ambiguity, role conflicts factor. Hasnain et al. (2001) on his study "role stress and coping strategies in different occupational groups" assessed the coping strategies in three different occupational groups (20 engineers, 20 managers and 20 teachers). Role over load and role erosion were found to be major sources of role stress in all three groups. Pandey and Tripathy (2001) also found that teaching is a stressful occupation. Job stressors in this profession are role ambiguity and unreasonable group pressure. Bhatia and Kumar (2005) attempted to explore occupational stress and burn out among employees.

Aftab and Khatoon (2012) examined the relationships of a set of independent variables (gender, qualification, teaching experience, salary, subjects taught and marital status) with occupational stress among secondary school teachers. According to the results of the analysis, teachers with an experience of 6-10 years face occupational stress the most, and 0-5 years the least; while those falling in the remaining two groups slide in between these two. Chaudhry (2012) explored the level of occupational stress among university teachers based on age, gender and type of organization. Descriptive statistics, inferential statistics, frequency tables, and ANOVA analysis have been used to analyze the data. The results indicate significant difference in the mean scores of faculty members having different age brackets regarding their perceived level of stress. The statistics shows the decreasing trend of stress with the increasing of age among the faculty members.

Literature related to Job Burnout

Teacher burnout, in particular, has received a high amount of attention for being an extremely stressful profession (Friedman, 2000). High level of burnout has been found among the teachers. In this respect, different negative effects of teacher burnout involving the decrease in workplace motivation, increase in probability of personnel turnover, and impact on the schooling climate have been reported (Kyriacou, 2001). Workplace stress, in turn, can lead to physiological, psychological and behavioral changes (Young & Yue, 2007).

Most of the studies on teacher burnout have explored the correlations or significant effects of demographic variables on the three dimensions of burnout experienced by teachers. In this regard, moderate, low, and high levels of emotional exhaustion, depersonalization, and lack of personal accomplishment, were found respectively, among the teachers (Bibou et al., 1999; Croom, 2003). Kirilmaz (2003) reported similar findings for the levels of emotional exhaustion and depersonalization in Turkey. He found that factors of age, gender, tenure, and number of children did not have any effect on the burnout level of primary school teachers, while their marital status did.

Gavrilovici (2009) studied the burnout level of teachers in primary, secondary, high schools, and special schools in Romania during the period 2007-2009. The results showed that emotional exhaustion of teachers with work experience of more than 17 years was significantly higher than teachers with less work experience. In contrast, no significant differences were found between the teachers work experience and their levels of depersonalization and lack of personal accomplishment. Likewise, gender and marital status did not show any effect on any dimension of the burnout. In the case of gender, mixed results have been reported. Lau et al. (2005) and Timms (2006) indicated that female teachers experience more burnout, while Bauer et al. (2007) showed the reverse.

Mukundan and Ahour (2011) studied the burnout level of female teachers in primary and secondary schools in Malaysia. The results showed that the number of children, level of teaching, age, and years of teaching experience were significant indicators of burnout among the female teachers, while marital status and workload were not significantly related to their burnout syndrome.

A recent study among teachers in Malaysia revealed that emotional exhaustion of female teachers and depersonalization of male teachers were significantly high, while both had significantly high level of lack of personal accomplishment. Teachers with less than 26 years of teaching experience revealed a significantly high level of emotional exhaustion. Teachers with more than five years of teaching experience had significantly high depersonalization, while teachers with less than five and more than 25 years of teaching experience showed significantly high lack of personal accomplishment (Mukundan & Khanderoo, 2009).

A study by Goswami (2013) investigated how teachers' burnout is related to different demographic characteristics such as age and gender. The results of this study showed the demographic variables age and area of work place affect job burnout. Jackson (1993) has found significant differences among employees' burnout in terms of gender, age and marital status. There are also researchers who have not reported a significant relationship between demographic variables and burnout (Dillon & Tanner, 1995; Friedman & Faber, 1992).

Numerous studies have confirmed that teaching can be a stressful profession. There is reduced consistency of findings with regard to demographic variables and occupational stress. Therefore, the problem focused in this study was whether the demographic factors are associated with teachers' stress and whether there is any association between the stress levels and their lifestyle balance which is also an important factor concerned in the management of stress.

Problem Statement

A descriptive study to evaluate the stress levels and professional burnout experienced by teachers working in primary and secondary schools in Cuttack.

Objectives:

- Assess the stress levels and professional burnout levels of the school teachers working in primary and secondary schools
- Assess the self care and life style balance of the school teachers.
- Determine the relationship between selected demographic variables and stress levels.
- Determine the correlation between the professional burnout and life style balance of the school teachers.
- Compare the stress levels of the primary school teachers with the stress levels of the secondary school teachers.

Scope:

The findings will help in better understanding of the various sources of stress experienced by the teaching staff of the school which in turn will help to identify the areas which require the administration's attention.

Hypothesis:

- **H1** There is significant association between the stress levels of teachers and the selected demographic variables (age, gender and experience).
- **H2** There is significant correlation between the professional burnout and lifestyle balance of the school teachers.
- **H3** There is significant difference between the stress levels of primary school teachers and secondary school teachers.

Limitations:

- The findings of the present study are limited to a small sample group of 100 as this is a mini research project. Therefore the generalization of the results may not be completely error free.
- The findings are limited to only four English medium schools in the town.
- The study is limited to the description of the problem i.e. the stress level and burnout level, and is not aiming at finding the solution of the problem.
- The study is limited to finding only some factors causing stress (age, gender and grade) and therefore the other related factors are not emphasized in this study.

Fig 1: Gantt chart showing the outline of the thesis:

Tasks	Start date	End date		October			November																																				
			16 1	7 18	19	20 2	1 2	2 2	3 2	1 25	26	27	28	29	30	31	1	2	3	4	5 6	6	7 8	8 9	10	11	12	13	14	15	16 1	7 1	8 1	9 2	0 2	1 22	23	24	25	26	27	28	29
Data on background	16-10-2013	20-10-2013																																								П	
Setting objectives	21-10-2013	22-10-2013																																									
Review of literature	23-10-2013	30-10-2013																																									
Organising of the questionaire	26-10-2013	03-11-2013																																									
Data collection	04-11-2013	13-11-2013																																									
Data analysis & interpretation	14-11-2013	23-11-2013																																									
Preparation of the final report	24-11-2013	29-11-2013																																									

METHODOLOGY

RESEARCH APPROACH: Descriptive approach is one of the most popular approaches these days. In this approach, the researcher describes a problem by using questionnaire or schedule. This approach enables a researcher to explore new areas of investigation.

RESEARCH DESIGN: A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In this study survey technique is used, wherein a well-structured questionnaire is framed. Data is collected from the primary and secondary school teachers in Cuttack. Findings are made and necessary suggestions and recommendations are given.

SAMPLE: The present work is a descriptive study investigating whether the occupational stress faced by the school teachers differed significantly with the respective demographic factors. The population comprised all the school teachers who worked in 4 selected schools of Cuttack. The sample size consisted of 50 primary school teachers and 50 secondary school teachers, selected from 4 schools in Cuttack by using simple random sampling technique.

INSTRUMENTS FOR DATA COLLECTION:

The tools used in this research are three self report measures which are as follows;

- 1. Headington Stress Index questionnaire
- 2. Headington Burnout Inventory
- 3. Self care and Lifestyle Balance Inventory

The entire three questionnaires are taken from the Headington Institute website. (http://www.headington-institute.org). The Headington Institute is approved by the American Psychological Association (APA) to sponsor continuing education for psychologists and the Board of Behavioral Sciences of California. The Institute offers a variety of training workshops, education materials, counseling and consulting services.

Headington Stress Index questionnaire: The scale consisted of twenty five items, each to be rated on five point scale ranging from 0 (Never) to 4 (Always). So the score of a person is rated on a maximum score of 100 and accordingly the interpretation of the score is made. (http://headington-institute.org/Portals/32/Resources/Test How_stressed are you.pdf). Split half method (Spearman Brown's formula) was applied to establish the reliability of the scale which was found to be 0.96 by the author.

Headington Burnout Inventory: This scale also consisted of twenty five items designed in the same manner as the Stress Index, but the questions directed towards diagnosing for burnout symptoms, and the items had to be rated by the respondents on a five point scale ranging from 0 (Never) to 4 (Always). The maximum score is 100. (http://headington-institute.org/Portals/32/Resources/Test Are you burnout.pdf). Split half method (Spearman Brown's formula) was applied to establish the reliability of the scale which was found to be 0.89 by the author.

Self care and Lifestyle Balance Inventory: The scale consists of twenty five items which again the respondents rate on a five point scale 0 to 4. Maximum score given here is 100. (http://headington-institute.org/Portals/32/Resources/Test Self care inventory.pdf). Split half method (Spearman Brown's formula) was applied to establish the reliability of the scale which was found to be 0.88 by the author.

PILOT STUDY: A pilot study was initially done to check the practicability and reliability of the research tools. For this the questionnaires were distributed to 20 teachers and then the scoring of the respondents was done based on their responses in the questionnaire. The study was found to be practical and the reliability of each of the tools also were found to be fairly good as mentioned in figures previously.

DATA COLLECTION: The data required for the present study were collected from four high schools in Cuttack using the survey method. The questionnaires were administrated individually. Respondents were requested to read each question carefully and then encircle the choice which best described their opinion regarding each item. The investigator distributed 200 questionnaires among the high school teachers in Cuttack. Each participant received questionnaire related to occupational stress, job burnout and lifestyle balance. Finally, the investigator collected 100 questionnaires from the teachers i.e. 50 from primary school teachers and 50 secondary school teachers.

STATISTICAL METHODS USED FOR ANALYSIS: Descriptive statistics such as Frequencies, Percentages, Mean, Standard deviation, Standard error were utilized for assessing the stress levels and burnout levels experienced by the school teachers and also to assess the lifestyle balance these teachers practiced. Inferential statistics such as ANOVA analysis, and correlation tests were utilized to test the stated hypothesis. According to the results achieved the hypothesis is either accepted or rejected.

DATA ANALYSIS AND INTERPRETATION:

The analysis of the study were organized and presented as follows:

Section I:

Description of sample characteristics according to the demographical variables such as Age, Gender, Marital status, Religion, Type of Family, Grade and Number of years of experience with the help of frequency and percentage distributions.

Section II:

Description of the stress levels, burnout levels and lifestyle balance of the school teachers with the help of percentage distributions.

Section III:

Relationship between the stress scores of the school teachers and selected demographical variables such as Age, Gender and Number of experience with the help of ANOVA tests.

Section IV:

Correlation between the burnout scores of the school teachers with the lifestyle balance scores using Karl Pearson's correlation coefficient tests.

Section V:

Comparison of stress scores of the Primary school teachers and the Secondary school teachers using ANOVA test.

SECTION I

Description of sample characteristics according to the demographical variables such as Age, Gender, Marital status, Religion, Type of Family, Grade and Number of years of experience are presented in the following tables and figures.

Table 1: Frequency and percentage distribution of School teachers according to Age. N = 100

Age	Frequency	Percentage
20 yrs to 30 yrs	16	16%
31 yrs to 40 yrs	22	22%
41 yrs to 50 yrs	31	31%
Above 51 yrs	31	31%

Fig. 2: Percentage distribution of school teachers according to age (sample size = 100).

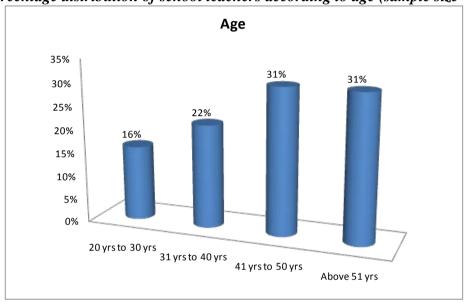


Table 2: Frequency and percentage distribution of School teachers according to Gender. N = 100

Gender	Frequency	Percentage
Male	12	12%
Female	88	88%

Fig. 3: Percentage distribution of school teachers according to gender.

Gender

Table 3: Frequency and percentage distribution of School teachers according to Marital Status.

N = 100

Marital Status	Frequency	Percentage
Unmarried	25	25%
Married	66	66%
Widow/Divorcee	9	9%

Fig. 4: Percentage distribution of school teachers according to marital status.



Table 4: Frequency and percentage distribution of School teachers according to Religion.

N = 100Frequency Religion **Percentage** 74 Hindu 74% 3 Muslim 3% 23 Christian 23% 0 Others 0%

Fig. 5: Percentage distribution of school teachers according to religion.

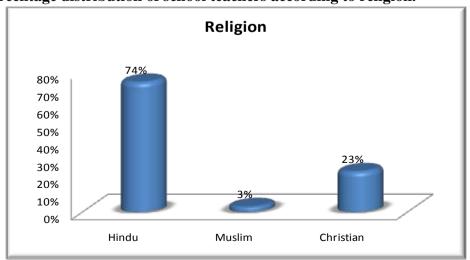


Table 5: Frequency and percentage distribution of School teachers according to Type of Family.

N = 100

Type of family	Frequency	Percentage
Single Parent	10	10%
Nuclear	52	52%
Joint	32	32%
Extended	4	4%
Any Other	1	1%

Fig. 6: Percentage distribution of school teachers according to type of family.

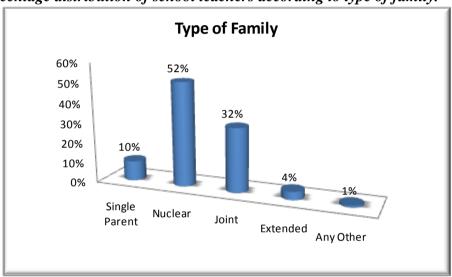


Table 6: Frequency and percentage distribution of School teachers according to Grade.

N = 100

Grade	Frequency	Percentage
Primary school teacher	50	50%
Secondary high school	50	50%

Fig. 7: Percentage distribution of school teachers according to grade.

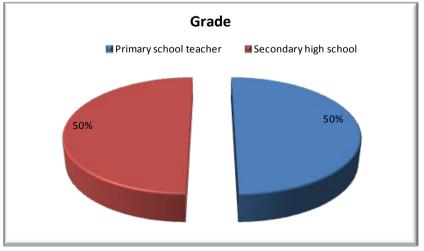
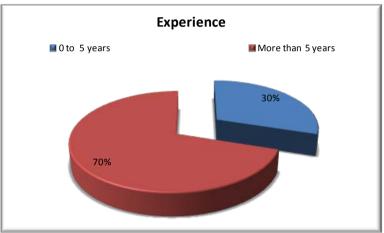


Table 7: Frequency and percentage distribution of School teachers according to Number of Years of experience.

N = 100

No. of years of experience	Frequency	Percentage
0 to 5 years	30	30%
More than 5 years	70	70%

Fig. 8: Percentage distribution of school teachers according to number of years of experience.



SECTION II

Description of the stress levels, burnout levels and lifestyle balance of the school teachers are presented in the following tables and figures.

Table 8: Frequency and percentage distribution of School teachers according to Levels of Stress. N=100

LEVELS OF STRESS	FREQUENCY	PERCENTAGE	MEAN	STANDARD DEVIATION
Very Less Stress	13	13%	23.52	1.45
Moderately Low Stress	58	58%	44.79	4.9
Moderately High Stress	29	29%	69.59	4.86
Very High Stress	0	0%		

Fig. 9: Percentage distribution of school teachers according to levels of stress.



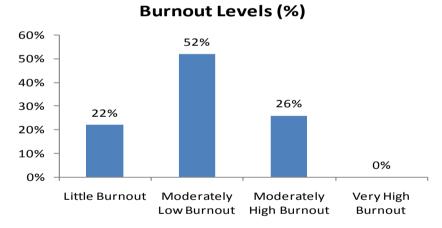
The Table no. 8/ Fig. 9 describes the number of respondents experiencing the respective levels of stress and even displays the mean stress scores experienced by each level. The maximum respondents are seen to be experiencing moderately low stress (58%) having a mean stress score of 44.79 which is more on the higher side. 29 respondents have reported having moderately high scores with a mean stress score of 69.59. The rest 13% of the respondents were experiencing very less stress and reported to have a mean stress score of 23.52.

Table 9: Frequency and percentage distribution of School teachers according to Levels of Burnout.

N = 100

LEVEL OF BURNOUT	FREQUENCY	PERCENTAGE	MEAN	STANDARD DEVIATION
Little Burnout	22	22%	23.27	1.55
Moderately Low				
Burnout	52	52%	43.62	4.49
Moderately High				
Burnout	26	26%	66.96	5.26
Very High				
Burnout	0	0%		

Fig. 10: Percentage distribution of school teachers according to levels of burnout.



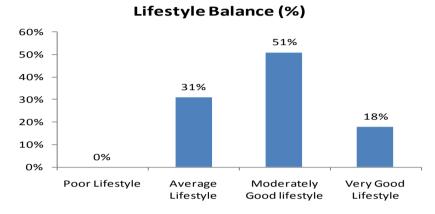
The Table No. 9/ Fig. 10 describes the number of respondents experiencing the respective levels of Burnout and even displays the mean burnout experienced by each level. The maximum respondents are seen to be experiencing moderately low burnout (52%) having a mean burnout score of 43.62 which is more on the higher side. 26% have reported having moderately high burnout with a mean burnout score of 66.96. And the remaining 22% respondents came under the category of 'little burnout', with a mean burnout score of 23.27.

Table 10: Frequency and percentage distribution of School teachers according to Level of Lifestyle balance. N=100

LIFESTYLE BALANCE	FREQUENCY	PERCENTAGE	MEAN	STANDARD DEVIATION
Poor Lifestyle	0	0%		
Average Lifestyle	31	31%	29.71	4.72

LIFESTYLE BALANCE	FREQUENCY	PERCENTAGE	MEAN	STANDARD DEVIATION
Moderately Good				
lifestyle	51	51%	62.73	6.58
Very Good				
Lifestyle	18	18%	80.78	4.57

Fig. 11: Percentage distribution of school teachers according to levels of lifestyle balance.



The Table No. 10/ Fig. 11 describes the number of respondents experiencing the respective levels of Lifestyle balance and even displays the mean stress scores experienced by each level. The maximum respondents are seen to be experiencing moderately good lifestyle balance (51%) having a mean lifestyle balance score of 62.73. 31% have reported having average lifestyle, with a mean score of 29.71. The remaining 18% respondents seem to maintain a very good self care and lifestyle balance, reporting a mean score of 80.78.

SECTION III

The relationship between the stress scores of the school teachers and selected demographical variables such as Age, Gender and Number of experience has been analyzed with the help of ANOVA tests.

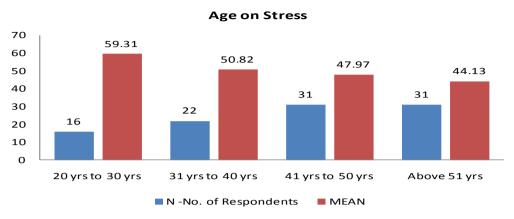
Table 11: Descriptive statistics of Stress scores of teachers in different age groups.

N = 100

							sum of squares	sum of squares
Particulars	Total	N	MEAN	SD S2		d	due to treatment	due to error
20 yrs to 30 yrs	949	16	59.31	13.47	181.5625	10.09	1629.74	2723.44
31 yrs to 40 yrs	1118	22	50.82	17.51	306.632	1.60	56.19	6439.27
41 yrs to 50 yrs	1487	31	47.97	14.90	221.8989	-1.25	48.61	6656.97
Above 51 yrs	1368	31	44.13	13.46	181.2495	-5.09	803.46	5437.48
	4922	100	49.22				2538.00	21257.16

Mean sum of squares due to treatment	846.00
Mean sum of squares due to error	221.43
F (3,96)	3.82
P value	0.012

Fig. 12: Frequency and mean stress scores of school teachers of different age groups.



A one-way ANOVA analysis was conducted to determine if there is a significant difference between the stress and age of the school teachers. The descriptive statistics are reported in Table 11 above. The mean stress score of younger teachers is seen to be higher than that of older teachers as seen in Fig 12. When the tests were conducted, it was found that there was significant difference between the stress scores of the different age groups (F = 3.82, p =0.012).

Table 12: Descriptive statistics of Stress scores of teachers according to number of years of

experience.

							sum of squares	sum of squares
Experience	N	Total	MEAN	SD	S2	d	due to treatment	due to error
0 to 5 years	25	1332	53.28	16.51	272.58	4.06	412.09	6541.92
More than 5 years	75	3590	47.87	15.02	225.60	-1.35	137.36	16694.43
	100	4152	49.22					

Mean sum of squares due to treatment = 549.45Mean sum of squares due to error = 237.11F (1,98) = 2.32P value = 0.131

Fig. 13: Frequency and mean stress scores of school teachers with different duration of experience.

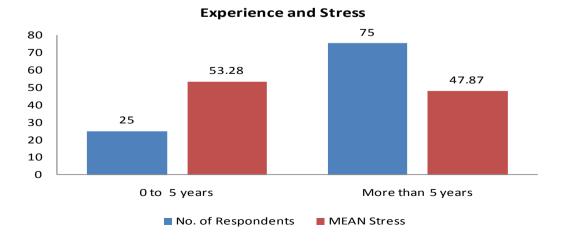
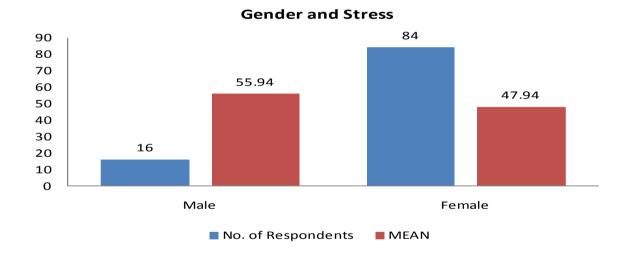


Table 12/ Fig. 13 display the descriptive statistics of the stress scores in relation with the number of years of experience. The mean stress scores seem to be more in case of school teachers who have less than 5 years of experience (53.28) as compared to the mean stress scores of the more experienced school teachers (47.87). However, when the ANOVA tests were conducted, the difference between the stress scores of the experienced and less experienced school teachers was found to be insignificant (F (1.98) = 2.32, p = 0.131).

Table 13: Descriptive statistics of stress scores of male and female school teachers.

							sum of squares	sum of squares
Gender	N	Total	MEAN	SD	S2	d	due to treatment	due to error
Male	16	895	55.94	14.13	199.64	6.72	722.00	2994.58
Female	84	4027	47.94	15.48	239.77	-1.28	137.52	19900.93
	100	4922	49.22					
		= 859.52						
		= 233.63						
		= 3.68						

P value Fig. 14: Frequency and mean stress scores of male and female school teachers



In the above Table 13, the descriptive statistics of stress scores of male school teachers and female school teachers are given. The mean stress scores of the male school teachers are seen to be higher than the female school teachers. However the ANOVA tests reveal a borderline insignificance, i.e. statistically there is insignificant difference between the stress scores of male and female school teachers (F (1, 98) = 3.68, p = 0.058).

SECTION IV

The relationship between the burnout scores of the school teachers with the lifestyle balance scores was determined using correlation coefficient tests.

= 0.058

Table 14: Karl Pearson's coefficient of correlation between burnout scores and the lifestyle balance scores of school teachers.

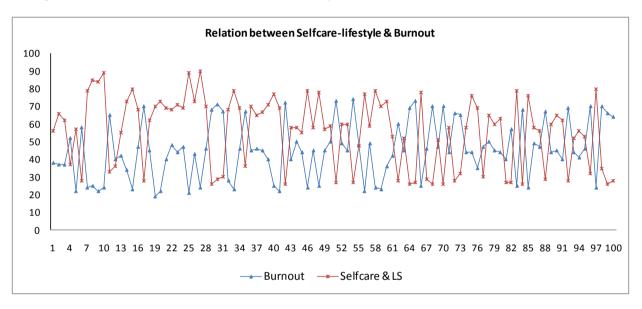
N	Σdx	Σdx^2	Σ dy	Σdy^2	Σ dx.dy	r
100	-1979	63957	5514	345542	-135469	-0.821

x = burn out scores of school teachers

y = lifestyle balance scores of school teachers

r = -0.821 (High degree of negative correlation)

Fig. 15: Correlation between self care-lifestyle and burnout levels of school teachers.



When Karl Pearson's Coefficient of Correlation was applied for relationship between burnout and lifestyle, it was observed that there is a high degree of negative correlation between burnout and lifestyle which is depicted in the Fig. 15 above. That meant; higher the burnout score, lesser was the self care and lifestyle balance and when the burnout levels were low, then the self care and lifestyle balance was better.

SECTION V

The comparison of stress scores of the Primary school teachers and the Secondary school teachers was accomplished by using one- way ANOVA analysis.

Table 15: Descriptive statistics of stress scores of primary and secondary school teachers.

							sum of squares	sum of squares
Grade	N	Total	MEAN	SD	S2	d	due to treatment	due to error
Primary school	50	2585	51.70	17.07	291.3849	2.48	307.52	14277.86
Secondary school	50	2337	46.74	13.48	181.7104	-2.48	307.52	8903.81
	100	4922	49.22				615.04	23181.67
		(15.04						

MST = 615.04 MSE = 236.55 F (1,98) = 2.60 P value = 0.11

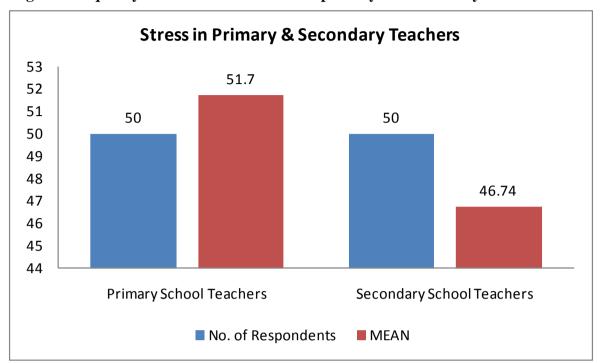


Fig. 16: Frequency and mean stress scores of primary and secondary school teachers.

Table 15/ Fig. 16 show a comparison of the mean stress scores of primary school teachers and secondary school teachers. According to this study the primary school teachers displays a higher mean stress score than the secondary school teachers. However the ANOVA tests reveals a relatively insignificant difference between the stress scores of primary and secondary school teachers (F (1,98)=2.60, p=0.11).

DISCUSSION

The main purpose of the study was to evaluate the stress levels and burnout experienced among teachers working in primary and secondary schools in Cuttack. Accordingly the first objective was to assess the stress levels and professional burnout levels of the school teachers working in primary and secondary schools. The present study suggests that more than half of the teachers' population (58%) faces moderately low stress levels, while in the remaining teachers; a large chunk of population (29%) falls in the moderately high stress category. The rest 13% teachers in contrast face very less stress levels and 0% comes under very high stress category. This is in partial accordance with Durani's observation (2009) who reported that among 150 women working as teachers in schools, 39% were having low stress, 20% were having high stress, 15% were having very average stress, 13% were having very high stress, 8% of the respondents no stress, and 5% very low stress and 0% were abnormal stress. This result is discordant with that of Nayak et al. (2009), who found the higher percentage of teachers (70.5%) to be in the low stress category, followed by very low stress category (23.5%) and lesser percent in moderate stress category (6.0%).

Similarly in the present study, the burnout levels in majority of the teacher population (52%) were observed to be moderately low category. The remaining teachers almost equally came under moderately high burnout (26%) and little burnout category (22%). None of the teachers (0%) seem to face very high burnout. This result to some extent contradicts the study made by Shukla and Trivedi (2008) which found that 11.88% of teachers showed a high burnout

level, while 2.81% of teachers had an average burnout level and 40% of teachers reflected a low burnout level.

The second objective of the present study had focused on the assessment of self care and lifestyle balance of the study population which was found to be more or less good in the school teachers. More than half (51%) of the teachers were observed coming under the moderately good lifestyle balance category indicating that the teachers did maintain good self care and life style balance. 31% maintained an average lifestyle, probably due to the stress and burnout that they faced in their profession, and 18% of the respondents did keep up a very good lifestyle balance.

The third objective of the present study was to determine the relationship between the selected demographic variables and the stress levels. The selected demographic variables were age of the teacher, gender and number of years of experience. Accordingly the first hypothesis was framed i.e. H1- There is significant association between the stress levels of teachers and the selected demographic variables (age, gender and experience). To assess this relationship, one way ANOVA analysis was done for all these variables. In the age and stress levels analysis, it was found that the mean stress score of younger teachers (59.31) aged between 20 to 30 years is seen to be higher than that of older teachers (44.13) who are above 50 years of age as seen in Fig 11. When the tests were conducted, it was found that there was significant difference between the stress scores of the different age groups (F = 3.82, p = 0.012). Chaudhry's (2012) studies on university teachers stress levels also had indicated similar significant difference in the mean scores of faculty members having different age brackets regarding their perceived level of stress wherein the statistics shows the decreasing trend of stress with the increasing of age among the faculty members.

There wasn't much significant difference estimated in the gender and stress analysis and also the experience and stress analysis. Where gender was concerned, the mean stress scores of the male school teachers are seen to be higher than the female school teachers. However the ANOVA tests reveal a borderline insignificance, i.e. statistically there is insignificant difference between the stress scores of male and female school teachers (F= 3.68, p = 0.058). This result is supported by the studies made by Zhao and Bi (2003), Dali(2004) and Coulter & Abney(2009) which have shown that there is no difference between the gender in the burnout syndrome. However the results reported here contradict those of other studies that reported higher stress in female primary and secondary staff (Antoniou et al., 2006; Laughlin, 1984; McCormick & Solman, 1992b; Timms et al. , 2006; Abdul Majid, 1998) and also the study of Byrne (1998) and Bhagawan (1997) who emphasized that the causes leading to burnout/stress affect male teachers more than the female teachers who have higher motivation.

The last demographic variable was experience which was analyzed with stress levels. Several researches showed that up to fifty percent of teachers leave the profession by the close of their fifth year of experience (Hanushek, 2007; Ingersoll, & Smith, 2003). Based on those previous studies, it was decided that for this study "novice" teachers would be those with up to five years of experience and that "experienced" teachers would be those with greater than five years of experience. The ANOVA showed that the teachers in these two groups determined by experience did not have a statistically significant difference (F = 2.32, p = 0.131) in their stress scores though the mean stress scores were higher for the "novice" teachers (55.94) while the stress scores was lower for the "experienced" teachers (47.94).

This result is supported by the findings of Fisher, M. H. (2011) which also states that no significant difference was found between the stress scores of the new and experienced teacher groups (F = 2.374, p = .124). The reason for the difference in the mean stress scores might be related to their professional role as a teacher that at older age, the role burden usually gets diluted because of their potentiality, increased capacity to analyze their role due to the job clarity; thus, they could perform their roles better (Aftab and Khatoon, 2012). Moreover, the older teachers might be more experienced and adaptable to the environment and more ready to cope with stress (Huberman, 1993).

Thus the first hypothesis of the present study i.e. H1 stated as "There is significant association between the stress levels of teachers and the selected demographic variables (age, gender and experience)" is partially accepted.

The fourth objective of the present study was to determine the correlation between the professional burnout and life style balance of the school teachers. To assess this, Karl Pearson's coefficient of correlation analysis was used. The r value was found to be -0.821, which meant a high degree of negative correlation. Thus the respondents experiencing high burnout maintained an average lifestyle balance, showing the positive effect that the self care and lifestyle balance had in reducing the stress and burnout levels. Thus the second hypothesis of the study stated as "There is significant correlation between the professional burnout and lifestyle balance of the school teachers" was accepted. This finding can be supported by the study conducted by Betoret (2006) who found that teachers with a reported higher amount of coping support at their schools and higher self-efficacy were found to be less stressed and more motivated and satisfied in the profession.

The fifth objective of the present study was to compare the stress levels of the primary school teachers with the stress levels of the secondary school teachers. In Fig.15 the primary school teachers displays a higher mean stress score than the secondary school teachers. However the ANOVA analysis reveals a relatively insignificant difference between the stress scores of primary and secondary school teachers (F = 2.60, p=0.11). Therefore the third hypothesis which is stated as "There is significant difference between the stress levels of primary school teachers and secondary school teachers" was rejected. This finding however is discordant with the research findings that had been published in BBC News in 1999 (http://news.bbc.co.uk/2/hi/uk news/education/558196.stm) which says that Primary school classroom teachers suffer more stress than secondary school teachers, deputy head teachers and head teachers, according to a study. Dr. Jayne Griffith, of University College London said regarding this difference, "It could be because primary school teachers stay with one class every day for a whole year. They're not only responsible for their education activities; they're responsible for their social and moral development." Similarly Antoniou, A.et al (2013) have statistically proved that teachers of Primary Education experience higher levels of stress compared to the teachers of Secondary Education.

CONCLUSIONS

After conducting this analysis, interpretation and discussion, the following conclusions were arrived at:

Majority of the teacher population experiences moderately low stress while remaining teachers' faces moderately high stress and very less stress. None of the teachers experiences very high stress.

- Similarly majority of the teacher population experiences moderately low burnout levels while the rest suffer either from moderately high burnout and little burnout levels.
- Excepting a small percentage of teachers, almost the rest of the teacher population maintains a moderately good self care and lifestyle balance. Few teachers maintain an average lifestyle.
- Feachers with lower age groups had higher levels of stress compared to teachers with higher age groups.
- Though not statistically significant, the male school teacher reported to have more stress than their female counterpart.
- Statistically there is no significant difference between the stress levels of 'novice' teacher and 'experienced' teacher but the mean stress scores were higher for the 'novice' or less experienced teachers.
- There is a strong correlation between the lifestyle balance and burnout levels experienced by the school teachers.
- Though not statistically proved in the present study, occupational stress is seen to be more prevalent among primary school teachers than in secondary school teachers.

EDUCATIONAL IMPLICATIONS

A teacher occupies an important place in the educational process. In fact, the influence of teachers on students cannot be fathomed. But teaching is a stressful career and few will refute the significance of the amount of stress involved in the career. When Freudenberger (1974) initially began his research on burnout, he started by researching burnout on all professions, not specifically education. This led up to discussions on the teaching profession. When discussing who is prone to burnout, Freudenberger claims those most at risk are "the dedicated and the committed" who are "seeking to respond to the recognized needs of people" (p. 161). That description can be interpreted to include teachers who "would rather put up than shut up" (p. 161). When even more pressure is added from administrators, stress levels increase and burnout worsens. Unfortunately, this causes many teachers to never see beyond their fifth year in the profession. An individual who is undergoing burnout may not be able to execute the role of teacher effectively.

The researchers expected to explore and provide an insight into the phenomenon of burnout among primary and secondary school teachers. The present study has made an attempt to systematically and analytically investigate the effects of age, gender, experience, grade and lifestyle balance variables on the stress levels of teachers. The findings of the current study are significant as they may lead to positive changes in educational institutions as well as in the quality of teaching personnel. The present study has important implications for the teaching community in general and for the educational institutions for improving the effectiveness, efficiency and the quality of education. The present study helps to create awareness among teachers about stress, burnout and its impact on health. The study has developed a profile of stress, burn out and lifestyle balance of teachers.

The findings of this study will be beneficial to teachers. They can use the knowledge of the findings in developing effective coping strategies and a pro-active behavior for the burnout process, so that it can be reversed in the initial stages through effective coping strategies. The institutions can also develop models to reduce stress and burnout. On the basis of this study, teachers may be enabled to identify distress-prone areas of their lives and develop awareness about them.

Similarly, these findings can be utilized by administrators and the educationists alike to develop and improve teacher performance and prevent the on-set of burnout. Preventive measures are always better than remedial action. Stress management or coping mechanisms may be taken as an input in teacher education programs. These findings can also be used to develop special provisions to encourage the reinvigoration of teachers.

RECOMMENDATIONS

Stress affects the efficiency of the individual. So, there is a need to provide proper conducive environment and support to teachers to maintain individual stress at their workplace. Teachers should be positive in facing their challenges, which will help them in improving their functional skills and reduce stress, so that their profession is not affected. 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 institution or management should check that, supervision, support and relationship with the teachers is properly taken care of and enhanced most strongly. Most importantly, it is recommended that principals and supervisors should investigate the causes for stress and evaluate the organizational climate of the school. They should also suggest ways, like workshops and seminars to alleviate and cope with stress.

REFERENCES

- Abdul Majid, I. (1998). Occupational stress and teachers job satisfaction: Implications to the human relations management approach. A thesis submitted in partial fulfillment of the requirement for the degree of Master of Education, Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University, Malaysia.
- Aftab, M., & Khatoon, T. (2012). Demographic differences and occupational stress of secondary school teachers. European Scientific Journal, 8(5).
- Ali Qadimi And Praveena K. B. (2013), "Occupational Stress And Job Burnout Among Primary School Teachers" Indian Streams Research Journal Vol-3, Issue-8
- Anil Shukla Tripta Trivedi (2008), Burnout in Indian Teachers, Asia Pacific Education Review, Vol. 9, No.3, 320-334
- Ansari, M. R. and Singh, R.P., 1997, A study on nature and extent of stress in teachers and impact of moderators on stress. Ph.D. Thesis, IARI, New Delhi.
- Antoniou, A. S., Polychroni, F., & Vlachakis, A. N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. Journal of Managerial Psychology, 21 (7), 682-690.
- Bauer, J., Stamm, A., Virnich, K., Wissing, K., Mueller, U., Wirsching, M. et al. (2006). Correlation between burnout syndrome and psychological and psychosomatic symptoms among teachers. International Archives of Occupational and Environmental Health, 79, 199-204.
- Betoret, F. D. (2006). Stressors, self-efficacy, coping resources, and burnout among secondary school teachers in Spain. *Educational Psychology*, 26(4), 519-539.
- Bhagawan, S. (1997). Job stress and burnout in teachers of secondary school in Orissa. Journal of Educational Research Extension, 33(4), 218-234.
- Bhatia, P. and Kumar, A., (2005), Occupational stress and burn out in industrial employees. Indian Psy. Rev., 64(4): 191-198.
- Blix, A. G., Cruise, R. J., Blix, M. and Blix, G.G., 1994, Occupational Stress among University teachers. Ednal. Res., 36: 157-169.

- Bunce, D., & West, M. A. (1996). Stress management and innovative interventions at work. Human Relations, 49(2), 209-231
- Byrne, J. J. (1998). Burnout: Its causes, effects and remedies. Contemporary Education, 69(2), 86-91. Chaudhry, A. Q. (2012). An Analysis of Relationship between Occupational Stress and Demographics in Universities: The Case of Pakistan. Bulletin of Education and Research, 34(2), 1-18.
- Chand, P., 2006, Psychological factors in the development of work stress. J.Com. Gui. Res.,23(2): 178-186. Chand, P. and Monga, O.P., 2007, Correlates of job stress and burn out. J.Com. Gui. Res.,24(3): 243-252.
- Coulter, M. A., & Abney, P. C. (2009). A study of burnout in international and country. International Review of Education, 105-121.
- Cox, S., Parmer, T., Tourkin, S., Warner, T., & Lyter, D. M. (2007). *Documentation for the 2004-2005 teacher follow-up survey* (NCES 2007-349). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Cox, T., (1978), Stress, London/New York: Macmillan.
- Croom, D. B. (2003). Teacher burnout in agricultural education. *Journal of Agricultural Education*, 44(2), 1-13.
- Dali, T. (2004). Psychosocial work characteristics as predictors for burnout: Findings from 3-year follow up of the PUMA study. Journal of Occupational and Environmental Medicine, 47, 1015-1025.
- DeRobbio, R. A., & Iwanicki, E. (1996, April). Factors accounting for burnout among secondary school faculty. Paper presented at the annual conference of the American Educational Research Association, New York, NY.
- Dillon, J. F., & Tanner, G. R. (1995). Dimensions of career burnout among educators. Journal and Mass Communication Educator, 50(2), 4-13
- Durani, A., (2009). Stress management among working women. Journal of Community Guidance & Research, 26(3), 377 389.
- Etzion, D. (1984). Moderating effect of social support on the stress-burnout relationship. Journal of Applied Psychology, 69, 615-622
- Fisher, M. H. (2011). Factors Influencing Stress, Burnout, and Retention of Secondary Teachers. *Current Issues in Education*, 14(1).
- Freudenberger, H. (1974). Staff burn-out. Journal of Social Issues, 30, 159-165.
- Friedman, I. A., & Farber, B. A. (1992). Professional self-concept as a predictor of teacher burnout. Journal of Educational Research, 86(1), 28-35.
- Fusilier, M. R., Ganster, D. C., & Mayes, B. T. (1987). Effects of social support, role stress, and locus of control on health. Journal of Management, 13, 517-528
- Goswami, M. A Study of Burnout of Secondary School Teachers in Relation to their Job Satisfaction.
- Hanushek, E. A. (2007). The single salary schedule and other issues of teacher pay. Peabody Journal of Education, 82(4), 574-586.
- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. (2001). Why public schools lose teachers. *NBER Working Paper Series*, 8599, 1-24.
- Hasnain, N., Shahnawaz, M.G. and Shukla, V., 2001, Role stress and coping strategies in different occupational groups. I.P.R. Special Millennium Issue, 54&55(4): 53-59.
- Hindrickson, B. (1979). Teacher burnout: How to recognize it, what to do about it. *Learning*, 7(5), 36-37.
- Huberman, Ml. (1993). Burnout in teaching careers. European Education, 25 (3) 47-69.
- Ingersoll, R. M. (2002). The teacher shortage: A case of wrong diagnosis and wrong prescription. *NASSP Bulletin*, 86(631), 16-31.

- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
- Jackson, R. A. (1993). An analysis of burnout among school of pharmacy faculty. American Journal of Pharmaceutical Education, 57(1), 9-17
- Jepson, E. Forrest, S. (2006). Individual contributory factors in teacher stress: The role of
- Kyriacou, C. (1987). Teacher stress and burnout: An international review. Educational Research, 29(2), 146-152.
- Kyriacou, C. (2001). Teacher Stress: Directions for Future Research. Educational Review, 53 (1), 27-35.
- Lambert, R. G., McCarthy, C. J., Gilbert, T., Sebree, M., & Steinley-Bumgarner, M. (2006). Validity evidence for the use of the Preventive Resources Inventory with college students. *Measurement and Evaluation in Counseling and Development*, 39, 66-85.
- Lambert, R., O'Donnell, M., Kusherman, J., & McCarthy, C. J. (2006). Teacher stress and classroom structural characteristics in preschool settings. In R. Lambert & C. McCarthy (Eds.), *Understanding teacher stress in an age of accountability* (pp. 105-120). Greenwich, CT: Information Age.
- Lau, P. S. Y., Yuen, M. T., & Chan, R. M. C. (2005). Do demographic characteristics make a difference to burnout among Hong Kong secondary school teachers? *Social Indicators Research*, 71(1-3), 491.
- Laughlin, A. (1984). Teacher Stress in an Australian Setting: The Role of Biographical mediators. Educational Studies, 10 (1), 7-22.
- Maslach, C. (1982). Burnout: The cost of caring. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Maslach, C., & Collins, G. R. (1977). The hazard of professional helpers. *Christianity Today*, 21(13), 12-14.
- Matt Jarvis Stress News January 2002 Vol.14 No.1
- McCarthy, C. J., Lambert, R. G., O'Donnell, M., & Melendres, L. T. (2009). The relation of elementary teachers' experience, stress, and coping resources to burnout symptoms. *Elementary School Journal*, 109(3), 282-300
- McCormick, J., & Solman, R. (1992b). Teachers' Attributions of Responsibility for Occupational Stress and Satisfaction: An Organisational Perspective. Educational Studies, 18 (2), 201-222.
- Minarik, M. M., Thornton, B., & Perreault, G. (2003). Systems thinking can improve teacher retention. *Clearing House*, 76(5), 230-234.
- Nayak, J., Sawkar, S. P., Bhat, A. R. S., Yenagi, G., & Hasalkar, S. (2009). Demographic characteristics and organizational sources of stressors. Journal of Community Guidance & Research, 26(3), 364-376.
- Pandey, R. and Tripathy, S., (2001), Occupational stress and burn out in engineering teachers. J. Indian Aca. App. Psy., 27(1&2): 67-73.
- Sbergis, P. A., & Vivona-Vaughn, E. (1995). Evaluation of an occupational stress intervention in a public agency. Journal of Organizational Behavior, 16, 29-48.
- Shukla, I. (2008). Burnout and stress among secondary school teachers in relation to their teaching effectiveness. E-journal of All India Association for Educational Research (EJAIAER), 20(3 & 4).
- Upadhyay, B.K. and Singh, B., 1999, Experience of stress: Differences between college teachers and executives. Psy. Stu., 44(3): 65-68.
- Worrall, N., & May, D. S. (1989). Towards a person-in-situation model of teacher stress. British Journal of Educational Psychology, 59, 174-86.
- Yong, Z., & Yue, Y. (2007). Causes for burnout among secondary and elementary school teachers and preventive strategies. Chinese Education & Society, 40(5), 78-85.
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