

DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF PERCEIVED STRESS AMONG CAREGIVERS OF PSYCHIATRIC PATIENT

Laxman Singh¹ & Shubhra Sharma²

¹Research IGNOU New Delhi, Presently Working at Command, Hospital Air Force College, Bangalore, India

²Research Scholar, M. PHIL Clinical Psychologist, Department of Psychiatry, Command Hospital Air Force College, Bangalore, India

Received: 30 Sep 2021

Accepted: 05 Oct 2021

Published: 08 Oct 2021

ABSTRACT

Perceived stress among Care giver of Psychiatric Patients is then specific response of the body to any demand placed upon it, it is a mental and physical condition which affects an individual's productivity, effectiveness, personal health and quality of work. Generally seeking, most caregiver feel some sense of purpose and accomplishment about their work, which can be morally and self-satisfying. Handling and nursing care of psychiatric patients in today's society is very demanding and stressful. Events perceived as potential threats trigger the stress response; a series of physiological and psychological changes that occur when coping capacities are seriously challenged. Perceived stress is of growing concern as it leads to psychological and physical problems for the caregiver. Researchers have argued that Perceived stress either as a result of its detrimental effects on the health of the individual or directly, led to low productivity, high absenteeism, tiredness, low enthusiasm for work, low creativity, and high dissatisfaction with work. This research study follows the descriptive method of research. The descriptive studies, in contrast to exploratory, related to more formalized studies typically structured with clearly stated hypotheses or investigative questions. Formal studies of this nature serve variety of research objectives such as, description of phenomena, characteristics associated with a subject population (who, what, when and how of a topic) and discovery of association among different variables. The study sample consisted of caregivers of psychiatric inpatients admitted in the Command Hospital Air Force and family member who is caregiver who were diagnosed as per the guidelines given in ICD-10. The psychiatric sample included Psychotic cases (50 cases), mood disorder (50 cases).The Perceived Stress Scale-10 (PSS; Cohen, Kamarack, & Mermelstein, 1983) is the most widely used measure of global perceived stress, and is a robust predictor of health and disease. In conclusion we can say that mental illness in the home can affect not only the quality of family life but also the health of the family members. A stressful emotional climate, anxieties and practical burdens, can have harmful effects on the physical and mental health of both adults and children. The role of family influences in causing and perpetuating the disorder of Psychotic (schizophrenia) and Mood disorder. Both mental illnesses are cause of stress on caregiver of psychiatric patients but Psychotic Disorder is more influence to caregiver compare patients with Mood Disorder and the same female care giver , perceived stress is more than male caregiver .In further increasing age of caregiver more vulnerable perceived stress compare lower age (20 yrs-45 yrs). In this study we also found that mother and husband more effected in lieu of perceived stress than wife and father (relation with psychiatric patients).The study also examines the importance of a good personality stress management and an individual's coping mechanism. This is also important for study that predict of stress on caregivers so it can be reduces with counselling and motivational.

KEYWORDS: Perceived Stress, Caregiver, Psychiatric Patients, Mood Disorder.

INTRODUCTION

Perceived Stress among Care giver of Psychiatric Patients It is of great concern to management, psychiatric patients: care giver seems to have a potential stressor. Continuous effort on research over years has provided us with an insight on Perceived stress among care giver. Research suggests that nature and degree of perceived stress varies psychiatric Centre and at home or clinic. The reasoning stress is the result of interaction of an individual with the psychiatric patients who required most of time close observation and its own typical environment and every patient is different from another, the nature and effect of stress changes from patients to patients and person to person.

Caregiver is an individual who has the responsibility of meeting the physical and psychological needs of the dependent patient. Psychiatric patients need assistance or supervision in their daily activities and this often places a major burden on their caregivers, thereby placing the caregiver at a great risk of mental and physical health problems. The term “caregiver burden” is used to describe the physical, emotional and financial toll of providing care. As the disease progresses, it carries with it a tremendous increase of burden on the caregiver who does the care giving. The burden perceived by caregivers of patients with psychiatric illness is a fundamental prognostic aspect as the caregiver burden is reportedly a critical determinant for negative care giving outcomes.

Handling and nursing care of psychiatric patients in today's society is very demanding and stressful. Events perceived as potential threats trigger the stress response; a series of physiological and psychological changes that occur when coping capacities are seriously challenged. The most typical trigger to the stress response is the perception that one's coping resources are inadequate for handling life's demands. When individuals feel an inability to control or reduce stress to a manageable level, they may become emotionally drained. The caregiver then experiences a reduction in accomplishments, leaving him or her with a loss of self-esteem and dissatisfaction with these job accomplishments. If you've been taking care of a chronically ill husband, wife, close relation, siblings, elderly parent or ward patient, you may be feeling the effects of caregiver stress. If you're feeling frustrated or overwhelmed or are experiencing increased stress level, you are not alone. Providing this type of care can place a great deal of pressure on a person, and caregivers are often. Here are just some of the pressures that many caregivers face. **Fear or Uncertainty**-If you're in the position of caring for someone with psychiatric patient there may be uncertainty as to how to proceed. Being in the position of being a caregiver usually carries some heavy responsibility and sometimes scary situations. **Financial Pressure** - As doctor bills and other treatment fees accrue, and as less energy is left for work, caregivers often find themselves facing financial pressures as well. **Isolation**-When dealing with the needs of someone (who requires constant care) a caregiver can feel isolated from the rest of the world, Whether you're in a position where it's unsafe to leave your loved one alone, or even if they just get lonely when you leave, you may find yourself much more tired to the house than before, which can make it more difficult for you to get exercise, connect with others, and do the things that help you take stress off. **Demands of Constant Care** - Many caregivers find themselves giving round-the-clock care, or spending virtually every free moment attending to the needs of their loved one. The feeling of being always on duty" can take a heavy toll on a caregiver. **Guilt**-Sometimes feelings of guilt accompany such feelings, as though they're a sign of disloyalty. There may also be guilt of caregiver feels they're not making their loved one as comfortable as they could be, even if there's really nothing else that can possibly be done.

Review of Related Literature

The advantage of the related literature is also to provide insight into statistical methods through which validity of results is to be established. By reviewing the related literature, the researcher can avoid unfruitful and useless problem areas. Review of literature helps to develop the researcher, an insight of the problem to be investigated, to get information of what others have done in related field, and what remains to be done. The review of literature provides insight into the methods, measures, subject, and approaches used by other research workers and can thus lead to significant improvement in the design. **Cooper & Marchall 1979** **ere tall (1978) Reported** that Perceived stress is of growing concern as it leads to psychological and physical problems for the caregiver. Researchers have argued that Perceived stress either as a result of its detrimental effects on the health of the individual or directly, led to low productivity, high absenteeism, tiredness, low enthusiasm for work, low creativity, and high dissatisfaction with work (Cooper & Marshall, 1978; Matteson & Ivancevich, 1987). **Selye (1976), says that Everly (1989)**. Was the nonspecific response of the body to any demand slyer treated stress as a reaction of an individual to a stressor. Again, every (1989) claimed that stress was a physiological response. Those who defined stress as a response argued that stress was a response to biological or psychosocial stressors. The response-based model used stress as a dependent variable. Whereas, in the stimulus-based model potential stressor was taken as an independent variable that affected as individual. In the stimulus-based model the stressor present in as environment was deemed to have uniform effect an all present, this very thought also become on all present, this very though also became the weakness of the model. **Lazarus & Folkman (1984)**. Held an interactive view in defining stress and suggested that when people realized that they were un able to cope with the demands placed upon them by their environment, they became stressed. Thus, according to the interactive view, stress was the result of cognitive interpretation given to the stressors. This meant that both perception of stimulus and response to it were important to the creation of stress and it was the gap between perceived ability and perceived demand which initiated the coping process and the consequence of coping strategy used, went as a feedback helping in reinterpreting the situation. If the level of experienced stress is significant, they feel strain in the form of psychological problems and physical problems, and long-term negative effects. **Kamala Darlami, Reshma Ponnose, Pradap Jose at**, reported that stress level of respondents revealed that majority of the respondents (86%) were at moderate stress, followed by 14% with severe stress, Study finding showed that caregivers were stressed with care giving, family and financial issue. In relation to coping strategies, 68% of respondent used active coping measures whereas 32% adopted passive coping method. Majority of the respondent used social support, positive reinterpretation and religious coping strategies to overcome the stress compared with socio demographic variable showed a significant association between religion, education, marital status, onset of illness, type of illness, type of patient and relation with patient.

A major part of man's life is spent in care of his near and dear person is suffering from mental illness, it is a social reality and social expectation to which man seems to confirm. Degree is in fact determined by the ration between what we have and what we want to our life. Human have to adjust continuously with the changing environment. When a person become happy in caring his near and dear member. Future expectation of caregiver also influences his job satisfaction level but today it is seen as a very complex cluster of attitudes towards different aspects of the work. It is also a pleasurable or positive emotional state and it is related to the work that individual performs.

RESEARCH METHODOLOGY

This research study follows the descriptive method of research. The descriptive studies, in contrast to exploratory, related to more formalized studies typically structured with clearly stated hypotheses or investigative questions. Formal studies of this nature serve variety of research objectives such as, description of phenomena, characteristics associated with a subject population (who, what, when and how of a topic) and discovery of association among different variables.

The statement of the research is "***DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF PERCEIVED STRESS AMONG CAREGIVERS OF PSYCHIATRIC PATIENT***"

OBJECTIVES OF THE STUDY

The following objectives are formulated for the proposed study:

- To study perceived stress in relation with coping of psychiatric patients.
- To study perceived stress caregiver with respect to OPD level, gender.
- To study perceived stress caregiver with respect to OPD level, age group.
- To study perceived stress caregiver with respect to OPD level, Diagnostic.

HYPOTHESES OF THE STUDY

- H₀₁. Perceived stress of caregiver is not significantly related to their gender.
- H₀₂. Perceived stress of caregiver is not significantly related to their age.
- H₀₃. Perceived stress of caregiver is not significantly related to their relation.
- H₀₄. Perceived stress of caregiver is not significantly related to illness of patients.

Method

The research study was designed to investigate the relation between caregiver performances, with psychiatric patients. These variables were further studied with reference to occupational level, gender and age. Both primary and secondary data sources were used. Primary data was sourced using research instrument having two parts was designed to elicit pertinent demographic information of the respondents. The second Part contained three psychometric instruments, perceived stress scale, Performance scale and Coping strategies scale. The three scale were of sufficient reliability. Secondary data sources were journals, books, reports. E-journal, newspaper. Multiple regression analysis, simple regression, correlation, z-statistic was conducted to explore different relationships.

Sample Design

The study sample consisted of caregivers of psychiatric inpatients admitted in the Command Hospital Air Force and family member who is caregiver who were diagnosed as per the guidelines given in ICD-10. The psychiatric sample included Psychotic cases (50 cases), mood disorder (50 cases).The sampling technique followed was stratified random sampling based on the proportion of psychiatric nursing assistant, and staff in psychiatric department. The required sample size was 100. The participants for this study were all worker in department of psychiatric which conducted OPD daily 125-150 per day.

Inclusion Criteria

- All are the worker of psychiatric hospital and at home may be mother, suppose, husband.
- Both male and female will be included. No discrimination with gender.
- Aged between 21 to 60.
- Diagnosed psychiatric patients with care giver

Exclusion Criteria

- Care giver with diagnosed with psychotic or other severe illness.
- Head injury care giver.

Description of Tool Used

The Perceived Stress Scale-10

The questions in this scale ask you about your feelings and thoughts during the LAST MONTH. In each case, please indicate with a check mark HOW OFTEN you felt or thought a certain way.

- In the last month, how often have you been upset because of something that happened unexpectedly?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you felt that you were unable to control the important things in your life?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you felt nervous and “stressed”?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you felt confident in your ability to handle your personal problems?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you felt that things were going your way?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you found that you could not cope with the things you had to do?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you been able to control irritations in your life?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often
- In the last month, how often have you felt that you were on top of things?
____ 0 = never ____ 1 = almost never ____ 2 = sometimes ____ 3 = fairly often ____ 4 = very often

- In the last month, how often have you been angered because of things that were outside of your control?
 ___ 0 = never ___ 1 = almost never ___ 2 = sometimes ___ 3 = fairly often ___ 4 = very often
- In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
 ___ 0 = never ___ 1 = almost never ___ 2 = sometimes ___ 3 = fairly often ___ 4 = very often

Data Analysis and Interpretations

In the present study, we considered as only one independent variables like perceived stress and its dimensions (i.e.,happened unexpectedly,unable to control the important things,nervous and “stressed, memory impairment, difficulties in piling up, lack of confidence, decrease coping skill, ambivalence, Responsibility for Person, Under participation, Powerlessness.

- H0₁. Perceived stress of caregiver isnot significantly related to their gender.

Table 1: Mean Scores of Male and Female Caregivers on Various Components of Perceived Stress and Results of Independent Samples ‘z’ test

z-Test: Two Sample for Means	Female	Male
Mean	19.04081633	17.18367347
Known Variance	50.6	22.64
Observations	49	49
Hypothesized Mean Difference	0.05	
z	1.478142682	
P(Z<=z) one-tail	0.069684796	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.139369592	
z Critical two-tail	1.959963985	

The mean perceived stress score of female caregivers were found to be 19.04 as against 17.18 of male giver. Independent samples ‘z’ test revealed a significant difference between mean PSS scores of male and female caregiver ($z=1.47$; z critical=(- 1.64 to 1.64).Here calculated value lies between table value z (critical) In perceived stress scores there were no significant differences between male and female caregivers. In this context, the null hypothesis that there is no significant difference between male and female caregivers accepted and alternative hypotheses rejected. p value 0.06 >0.05 than null hypothesis is accepted and alternative hypothesis is rejected. Early studies indicated that "there were no gender differences in the sources of stressors.

Demographic factors such as gender have been associated with at least perceived. In addition, there are a variety of other sources as well as other studies that report similar. In terms of gender, man is more likely to have higher stress levels; than women. Results of current study revealed that male caregiver and female caregivers feels almost same perceived stress. There was no significantly related to their gender.

- H0₂. Perceived stress of caregiver is not significantly related to their age.

Table 2: Mean Scores of Different Age Group of Caregivers on Perceived Stress and Results of Independent Samples 'z' test

z-Test: Two Sample for Means	Age 20-45 yrs	Age 46 and above
Mean	17.6122449	18.59183673
Known Variance	35.56	38.48
Observations	49	49
Hypothesized Mean Difference	0.05	
z	-0.837586995	
P(Z<=z) one-tail	0.20113135	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.402262699	
z Critical two-tail	1.959963985	

Significant at 0.05 Level

The mean perceived stress score of age group (20-45yrs) caregivers were found to be 17.61 as against 18.59 of Age group (46yrs and above). Independent samples 'z' test revealed a significant difference between mean PSS scores of age group caregiver ($z = -0.83$; z critical=(- 1.64 to +1.64)). Here calculated value lies between table value z (critical) In perceived stress scores there were no significant differences between both age group caregivers. In this context, the null hypothesis that there is no significant difference between age group caregivers accepted and alternative hypotheses rejected. p value $0.2 > 0.05$ than null hypothesis is accepted and alternative hypothesis is rejected. Early studies indicated that "there were no gender differences in the sources of stressors. Early studies indicated that "there were no age factor differences in the sources of stressors.

Demographic factors such as age have been associated with perceived stress. In addition, there are a variety of other sources as well as other studies that report similar results. In terms of age, during increasing of age are more likely to have higher perceived stress levels; while lower age group have less perceived stress compare older age group scores on the perceived stress scale of the Results of current study revealed that age of caregiver is not an important role and not vulnerable for perceived stress.

- H_0_3 . Perceived stress of caregiver is not significantly related to their relation.

Table 3: Mean Scores of Caregivers in Respect of their Relation with Psychiatric Patients of Perceived Stress Scale and Results of Independent Samples 'z' test

z-Test: Two Sample for Means	Wife /Husband	Mother/Father
Mean	17.53061224	18.69387755
Known Variance	29.8	43.95
Observations	49	49
Hypothesized Mean Difference	0.05	
z	-0.98894652	
P(Z<=z) one-tail	0.161344654	
z Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.322689308	
z Critical two-tail	1.959963985	

Significant at 0.05 Level

The mean perceived score of relation group with psychiatric patients (Wife/Husband) caregivers were found to be 17.53 as against 18.69 of relation group Mother/Father). Independent samples 'z' test revealed a significant difference between mean PSS scores of both relation caregiver group ($z = -0.98$; z critical=(- 1.64 to +1.64)) here calculated value lies between table value z (critical) In perceived stress scores there were no significant differences between both relation group caregivers. In this context,

the null hypothesis that there is no significant difference between age groupcare givers accepted and alternative hypotheses rejected. p value $0.16 > 0.05$ than null hypothesis is accepted and alternative hypothesis is rejected. In relation mother-father and wife-husband have same perceived stress. There is no significant difference between husband/wife and mother/ father caregivers. In this context, the hypothesis that there is no significant difference between wife - husband and mother -father with reference to perceived stress. These results are supported the study of Green glass and Burke (1988). Gursel, Sunbul and Sari (2002) indicated that caregiver (husband-wife) have less emotional exhaustion. These findings supported Borg and Riding (1991) findings.

- H04. Perceived stress of caregiver is not significantly related to their Diagnosis.

Table 4: Mean Scores of Perceived Stress of Caregiver on Various Components of Diagnosis and Results of Independent Samples 'z' test

z-Test: Two Sample for Means	13	18
Mean	17.71428571	21.6122449
Known Variance	34.48	32.94
Observations	49	49
Hypothesized Mean Difference	0.05	
<i>z</i>	-3.365707108	
P(Z<=z) one-tail	0.000381739	
<i>z</i> Critical one-tail	1.644853627	
P(Z<=z) two-tail	0.000763477	
<i>z</i> Critical two-tail	1.959963985	

Significant at 0.05 Level

The mean perceived stress score of difference diagnostic psychiatric patients' caregivers' group psychotic and mood disorder were found to be 17.71 as against 21.61 of psychotic care group .Independent samples 'z' test revealed a significant difference between mean PSS scores of both caregiver group ($z = -3.36$; z critical=(- 1.64 to +1.64) here calculated value not lies between table value z (critical) In perceived stress scores there were significant differences between both relation group care givers. In this context, the null hypothesis that there is no significant difference between age group care givers rejected and alternative hypotheses accepted, p value $0.00076 < 0.05$ than null hypothesis is rejected and alternative hypothesis is accepted. In caregivers (caring of mood disorder less perceived stress compare caregivers (Psychotic patients) there is significant difference care givers (Mood Disorder & Psychotic Disorder) in perceived stress.

In the current study, results of exploring level of Diagnosis on perceived revealed that in caregiver who is caring of psychotic disorder having higher perceived stress compare of caring giver of patients which are suffering of mood disorder differ significantly.

CONCLUSIONS & SUGGESTIONS

Discussion presents the major findings of the study and discusses them in relation to similar studies conducted by other researchers. The present study intended to find out the perceived stresses on caregiver that is dependence on age of care giver, relation with patients, diagnosis of patients, gender of caregivers. The findings of the study are discussed with reference to the objectives and with findings of other studies. The most commonly used procedure in the prediction of a continuous criterion variable is the multiple linear regression models. Weights are known, as regression coefficients are determined for each predictor variable. The resulting sum of squares on the composite of these variables will show the highest possible relationship (multiple correlation) with the criterion variable. The most commonly applied computational procedures for multiple linear regressions, which have now been made feasible by electronic computers.

In this method, multiple correlation coefficients reveal the degree of relation between linear combination of independent (or predictor) variable and respective dependent (or criterion) variable. In this method, multiple correlations and multiple linear regressions reveal the degree to which each independent variable is related to perceived stress and its dimensions (i.e. age of care giver, gender of caregiver, relationship with patients, diagnosis of patients). To identify this type of relationship between of independent variable on the one hand and the dependent variable on the other hand, the multiple correlations.

A Structured questionnaire (PSS) was used to collect the data. A True Experimental Research Design with Experimental and Control groups was used to evaluate the knowledge of 100 samples (from caregiver which are comes in Psy OPD by PNA) regarding stress.

CONCLUSIONS

This chapter presents the conclusions drawn, implications, limitations, suggestions and recommendations. Researcher focuses of this study was to evaluate the perceived stress among caregivers and what are the factors which can influence the level of perceived stress among caregivers who attended OPD in selected command hospital air force Bangalore. Using a PSS scale simple random sampling 100 samples were selected. The data was collected by psychiatric nursing asst Interview Schedule and with scale. Data was analysed and interpreted by applying statistical methods.

Further, the conclusion drawn on the basis of the findings of the study includes: -The overall mean and mean percentage of pre-test knowledge scores of gender group regarding female and male of caregivers was found to be 19.4;44.55% for female and 17.8; 46.6% for male respectively. It indicates that little differences in gender group regarded perceived stress almost same value of both groups. The overall mean and mean percentage of pre-test knowledge scores of age group (20 yrs. -45 yrs and above 46 yrs) of caregivers was found to be 17.61; 42.2% for age group 20-45yrs and 18.59; 46.5% for 46 yrs above respectively. It indicates that little differences in age group regarded perceived stress almost same value of both groups. The overall mean and mean percentage of pre-test knowledge scores of relation group regarding wife/husband and mother/father of caregivers was found to be 17.53; 43.85% for wife/husband and 18.85; 46.85% for mother/father respectively. It indicates that little differences in relation group with patients regarded perceived stress almost same value of both groups. The overall mean and mean percentage of pre-test knowledge scores of illness group of patients regarding patients were suffering with mood disorder and psychotic disorder and stress on caregivers was found to be 17.71; 44.05% for caregivers which were giving care to mood disorder patients and 21.61; 54.95% for caregivers which were giving care to psychotic disorder patients respectively. It indicates that differences in illness group regarded perceived stress increase level in psychotic group here we can say that caregiver's wo were caring of patients (psychotic illness) perceived high stress compare caregivers who were giving care to patients (mood disorder).

The term "Stress" is used to reflect problems of daily life, anxiety, depression, frustration, alienation and emotional distress. Stress management is therefore undertaken to maintain a healthy and productive level of stimulation. Unmanaged stress results in negative health effects like exhaustion, physical pain, depression, sleep disturbances and even death.

In conclusion we can say that mental illness in the home can affect not only the quality of family life but also the health of the family members. A stressful emotional climate, anxieties and practical burdens, can have harmful effects a on the physical and mental health of both adults and children. The role of family influences in causing and perpetuating the disorder of Psychotic (schizophrenia) and Mood disorder. Both mental illnesses are cause of stress on caregiver of

psychiatric patients but Psychotic Disorder is more influence to caregiver compare patients with Mood Disorder and the same female care giver, perceived stress is generally same in age, sex, relation except illness of patients. In further caregivers who care psychotic patients more vulnerable perceived stress compare mood disorder in this study we also found.

NEED FOR THE STUDY

The researcher felt a need to study important factors which are conducive to perceived stress in caregiver which in turn gives equitable rewards and a supportive working condition in combined with support from relatives and peers. The study also examines the importance of a good personality stress management and an individual's coping mechanism. This is also important for study that predict of stress on caregivers so it can be reduces with counselling and motivational.

LIMITATIONS OF THE STUDY

- The study is limited to the study of professionals in Bangalore only.
- The universe being large, the study was conducted using voluntary sample.
- Data collection was a difficult task. Many questionnaires were distributed but all were not returned.
- During data collection psychotic patients especially symptomatic patients interferes to caregivers.

REFERENCES

1. *Abdel-Halim, A. A., Social support and Managerial affective responses to Job stress.*
2. *Journal of Occupational Behaviour, (1982), 3(4), pp. 281- 295.*
3. *Ahmad, S., and Narula, S., A Study of Stress among Executives, Journal of Personality and Clinical Studies, (1985), 1(2) 47-50.*
4. *Beehr, T.A., & Newman, J.E., Job stress, employee health, and organizational effectiveness: A facet analysis, mode, and literature review. Personal Psychology,*
5. *Bernin, P., Theorell, T., Cooper, C.L., Sparks, K., Spector, P.E., Radhakrishnan, P., Russinova, V., Coping Strategies among Swedish Female and Male Managers in an*
6. *Biron, C., Gatrell, C., Cooper, C.L., Autopsy of a failure: Evaluating process and contextual issues in an organizational-level work stress intervention. International Journal of Stress Management, (2010) Vol 17(2), May, 135-158.*
7. *Bowman, G.D., Stern, M., Adjustment to occupational stress: the relationship of perceived control to effectiveness of coping strategies. Journal of Counselling Psychology, (1995) Vol 42(3), Jul, 294-303.*
8. *Bogg, J., and Cooper, C., Job Satisfaction, Mental Health and Occupational Stress Among Senior Civil Servants, Human Relations, (1995) March, Vol. 48, Issue, 3, pp Caplan, R.D., Cobb, S., French, J.R.P., Relationships of cessation of smoking*

9. Casas, J.M., Furlong, M.J., Castillo, S., *Stress and coping among university counsellors: A minority perspective.* *Journal of Counselling Psychology*, (1980) Vol 27(4), Jul, 364-373.
10. Catano, V., Francis, L., Haines, T., Kirpalani, H., Shannon, H., Stringer, B., Lozancki, L., *Occupational stress in Canadian universities: A national survey.* *International Journal of Stress Management*, (2010) Vol 17(3), Aug, 232-258.
11. Cronbach, L. J. (1951). *Coefficient alpha and internal structure of tests.* *Psychometrika* 1.
12. Daftur, C.N. & Nair, P., *Impact of organizational culture on occupational stress,* *Journal of Psychological Researchs*, (2000) Vol.44, No.2.
13. De Jonge, J., Dormann, C., *Stressors, resources and strain at work: A longitudinal test of the triple-match principle.* *Journal of Applied Psychology*, (2006) Vol 91(6),
14. Ellis, Aleksander P. J., Pearsall, M. J., *Reducing the negative effects of stress in teams through cross-training: A job demands-resources model.* *Group Dynamics: Theory, Research, and Practice*, (2011) Vol. 15(1), Mar 2011, 16-31.
15. Farber, B.A., Heifetz, L. J., *The satisfactions and stresses of psychotherapeutic work:A factor analytic study.* *Professional Psychology*, (1981)Vol 12(5), Oct 1981, 621-630.
16. Fay, D., Sonnentag, S., *Rethinking the effects of stressors: A longitudinal study on personal initiative.* *Journal of Occupational Health Psychology*, (2002) Vol 7(3), Jul 2002, 221-234.
17. Fevre, M.L., Matheny, J., Kolt, G.S., *Eustress, distress, and interpretation in occupational stress,* *Journal of managerial psychology*, (2003) Vol. 18, No. 7, pp 726- 744.
18. Flaxman, P.E., Bond, F.W., *Worksite stress management training: Moderated effects and clinical significance.* *Journal of Occupational Health Psychology*, (2010) Vol 15 (4), Oct 2010, 347-358.
19. Gaur, S.P & Dhawan, N., *Work related stress and adaptation pattern among women professionals,* *Psychological studies*,(2000) 45(1 & 2), 58-64.
20. Gupta, P., *Role Stress, Locus of Control, Coping Style and Role Efficacy: A Study of First Generation Entrepreneurs, M. Phil. dissertation*, (1989) University of Delhi,
21. Hahn, V. C., Binnewies, C., Sonnentag, S., Mojza, E. J., *Learning how to recover from job stress: Effects of a recovery training program on recovery, recovery-related self-efficacy, and well-being.* *Journal of Occupational Health Psychology*, (2011) Vol 16(2), Apr 2011, 202-216.
22. Study. *International Journal of Stress Management*, (2004) Vol 11(1), Feb 2004, 56-79.
23. Jacobs, P.A., Tytherleigh, M.Y., Webb, C., Cooper, C.L., *Predictors of work performance among higher education employees: An examination using the ASSET Model of stress.* *International Journal of Stress Management*, (2007)Vol 14(2), May 2007, 199-210.
24. Jamal., M., *Job stress and job performance controversy: An empirical assessment.* *Organizational Behaviour and Human Performance.* (1984) 33, Issues 1, February 1984, Pages 1-21

25. Jamal., M., *Job stress and job performance controversy revisited: An empirical examination in two countries.* *International Journal of Stress Management*, (2007) Vol 14(2), May 2007, 175-187.
26. Jimmieson, N.L., McKimmie, B. M., Hannam, R.L., Gallagher, J., *An investigation of the stress-buffering effects of social support in the occupational stress process as a function of team identification.* *Group Dynamics: Theory, Research, and Practice*, (2010) Vol 14(4), Dec 2010, 350-367.
27. Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek.,J.D., Rosenthal, R.A.(1964) *Organizational stress: Studies in role conflict and ambiguity*, *International Journal Of Stress Management*, (1964) ol 1, Issue 4,pp.XII; 470
28. Katz, J., Weiner, H., Gallagher, T., and Hellman, L., *Stress, distress and ego defences*, *Archives of General Psychiatry*, (1970) 23, 131-142.
29. Kaur, G. and Murthy, V.N., *Organizational role stress, coping strategies and locus of control in a major public sector industrial organization*, (1986) *Unpublished Manuscript*.
30. Kerle, R. H. and Bialek, H. M. (1958). *The construction, validation and application of a subjective stress scale.* Presidio of Monterey. CA: US Army Leadership Human Research Unit. Human Resources Research Office (DTIC No. 489 875)
31. Lang, J., Thomas, J. L., Bliese, P. D., Adler, A.B., *Job demands and job performance: The mediating effect of psychological and physical strain and the moderating effect of role clarity.* *Journal of Occupational Health Psychology*, (2007) Vol 12(2), Apr 2007, 116-124.
32. Leigh J.H., Lucas, G.H. and Woodman R.W., *Effect of Perceived Organizational and Factors on role stress Job attitude relationship.* *Journal of Management*, (1988)14(1) pp. 41- 58.
33. Leung, Sharron S. K., Mak, Yim Wah., Chui Ying Yu., Chiang Vico C. L., Lee Angel C. K., *Occupational stress, mental health status and stress management behaviours among secondary school teachers in Hong Kong.* *Health Education Journal*, (2009). Vol.68, No.4, pp328-343.
34. Loosemore,M., and Waters, T., *Gender differences in occupational stress among professionals of construction industry*, *Journal of Management in Engineering*, (2004) 20, 3.
35. Mathur, P., *Perception of police stress: An empirical study of stressors & coping responses among police personnel in India.*, *Indian Psychological abstract and reviews*, (1995) vol. 10, sage publication
36. Mc Gowan, J., Gardener,D.,& Fletcher, R., *Positive and negative affective outcomes of occupational stress*, *New Zealand Journal of Psychology*,(2006) Vol.35(2), 200
37. Meglino, B. M., *Organizational behavior and human performance*, (1977) Volume 33, Academic Press.
38. Narayanan,L., Menon,S., Spector, P., *A Cross-Cultural Comparison of Job Stressors and Reactions Among Employees Holding Comparable Jobs in two countries*, *International Journal of Stress Management*, (1999),6(3),197-212, Springer Netherlands.201 Nowak, K.M., *Coping Style, cognitive hardiness and health status*, *Journal of Behavioural Medicine*, (1989) 12, 145- 148.

39. Nowack, K., *Occupational stress management: Effective or not?* (2000). In P. Schnall, K. Belkie, P. Landensbergis, & D. Baker (Eds.). *Occupational Medicine: State of the Art Reviews*, Hanley and Belfus, Inc., Philadelphia, PA., Vol 15, No. 1, pp. 231-233.
40. Oliver, Joseph E.; Mansell, Angela; Jose, Paul E., *A longitudinal study of the role of negative affectivity on the work stressor-strain process*. *International Journal of Stress Management*, (2010) Vol 17(1), Feb 2010, 56-77.
41. Pandey, S., *Role Stress, Coping Strategies and Psycho-social Correlates*, Ph.D. thesis, (1994), Gurukul Kangri Vishwavidhyalaya, Haridwar.
42. Parkes, Katharine R., *Coping, negative affectivity and the work environment: additive and interactive predictors of mental health*. *Journal of Applied Psychology*, (1990) Vol 75(4), Aug 1990, 399-409.
43. Patricia H. and Doyle C., *Occupational stress, burnout and job status in female academics. Gender, work and organization*, (1998) Vol. 5 no. 2., April, 1998, Blackwell Publishers Ltd.
44. Prati, G., Pietrantoni, L., Cicognani, E., *Coping strategies and collective efficacy as mediators between stress appraisal and quality of life among rescue workers*. *International Journal of Stress Management*, (2011) Vol 18(2), May 2011, 181-195.
45. Rajagopalan, M. and Khandelwal, P., *A Study of Role Stress and Coping Styles of Public Sector Managers*, *Psychological Studies*, (1988) 33(3), 200-204.
46. Raju, M.V.R., and Madhu, K., *Organizational Level and Role Stress*. *Journal of Indian Psychology*, (1994) Vol. 12, pp. 1-2.
47. Sanders, A., *Towards a Model for Stress and Human Performance*, *Acta Psychological*, (1983) vol. 53, pp.61 – 97
48. Savery, Lawson K. and Luks, J. Alan., *The relationship between empowerment, job satisfaction and reported stress levels: some Australian evidence*, *Leadership & Sayeed, O.B. and Kumar, S.C., Role, work perception & stress in a high reliability work environment*, *Indian Journal of Industrial Relations*, (1980). Volume: 46 Source Issue: 2
49. Sayeed, O.B., *Job Stress and Role Making Behaviour*, *Managerial Psychology*, (1985) 6 (182):35-57
50. Schaubroeck, J., Ganster, D.C., Sime, W.E., & Ditman, D., *A field experiment testing supervisory role clarification*, *Personnel psychology*, (1993) 46 ,1- 25. Schuler, R.S., *Definition and conceptualization of stress in organizations*, *Organizational Behaviour and Human Performance*, (1980) 24: 115-130.
51. Scott, W.E., *Activation theory and task design*. *Organizational Behaviour and Human Performance*, (1966) 1, 3-30
52. Siu, O.L., Lu, L. and Cooper, C.L., *Managerial Stress in Hong Kong and Taiwan: A Comparative study*, *Journal of Managerial Psychology*, Bradford, (1999) Vol.14, Iss.1, pp 6-25.
53. Smith, M.J., Cohen,B.G., Tasto, D.L., *Health and safety consequences of shift work in the food processing industry*. *Ergonomics*, (1982) 25, 133-44.

54. Surti, K., *Some Psychological Correlates of Role Stress and Coping Styles in Working Women*, Ph.D. thesis(1982), University of Gujarat, Ahmedabad.
55. Swanson, V., Power, K.G., & Simpson, R. J., *Occupational stress and family life: A comparison of male and female doctors*. *Journal of Occupational and Organizational Psychology*, (1998) Vol. 71, pp. 237-260.
56. Tobin, Im., *An exploratory study of time stress and its causes among government employees*, *Public Administration Review*, (2009) Vol.69, Issue 1, pp 104-115.
57. Torkelson, E. and Muhonen, T., *The role of gender and job level in coping with occupational stress*, *Work and Stress*, (2004) Vol.18, Iss. 3, pp 267-274.
58. Umiker, W., *Motivating the Burned-Out Employee*. *The Health Care Supervisor*, (1992) 11 (1), 21- 27.
59. Vokic,N.P., and Bogdanic, A., *Individual difference in occupational stress perceived: A Croatian Study*, *Woking Paper Series*, (2007) Paper No. 07-05
60. Wallace, J. Craig; Edwards, Bryan D.; Arnold, Todd; Frazier, M. Lance; Finch, David M., *Work stressors, role-based performance and the moderating influence of organizational support*. *Journal of Applied Psychology*, (2009) Vol 94(1), Jan 2009, 254-262.
61. West, Daniel J., Horan, John J.,Games, Paul A., *Component analysis of occupational stress inoculation applied to registered nurses in an acute care hospital setting*. *Journal of Counseling Psychology*, (1984) Vol 31(2), Apr 1984, 209-218. Xie, J.L., & Johns, G., *Job scope and stress: Can scope be too high?* *Academy of Management Journal*, .(1995) 38, 1288- 1309.
62. Yagil, D., Ben-Zur, H., Tamir, I., *Do employees cope effectively with abusive supervision at work? An exploratory study*. *International Journal of Stress Management*, (2011) Vol 18(1), Feb 2011, 5-23.
63. Yerkes, R., and Dodson, J., *The Relation of Stimulus to Rapidity of Habit Formation*, *Journal of Comparative Neurology and Psychology*, (1908) Vol. 18. pp.459-482
64. Zani, B., and Pietrantoni,L., *Gender Differences in Empowerment, Burnout and Somatic Symptoms among Health Professionals: Moderators and Mediators*, *Equal Opportunity International*, Patrington, (2001) Vol. 20, Iss1/2, pp39- 48

BOOKS

65. Avasthi, A., & Maheshwari, S., *Public Administration*, Lakshmi NarainAgrawal:Educational Publishers, Agra, (2011).
66. Beehr, T.A., & Bhagat, R.S., (Eds), *Human stress and cognition in organizations* (pp. 3- 19). New York: John Wiley (1985).
67. Bernadin, H. John., *Compensation and managing human resources*, HRM an experiential approach, 3rd international edition, Mc-Graw Hill, 2003, part-IV, 327.
68. (1990). In S.M. Jex, *Stress and Job Performance Theory, Research and Implications for Managerial Practice*, Sage Publication (1998).

69. Campbell, J.P., Dunnette, M.D., Lawler, E.E., & Weick, K.E., *Managerial behaviour, performance, and effectiveness*. New York: McGraw – Hill (1970).
70. Drucker, Peter., *Management- Tasks, Responsibilities and Practices*, Harper and Row Publishers, New York. (1974).
71. Dwivedi, R.K., *Organizational Culture and Performance*, New Delhi: M.D. Publications (1995).
72. Everly, G.S., *A Clinical Guide to the Treatment of the Human Stress Response*. Plenum Press: New York (1989).
73. Goldstein, I.L., *Training in organizations*, 3rd ed., Pacific Grove, CA: Brooks/Cole
74. Golembienski, Robert T., *Organization Development (OD) Interventions* in W.S. Paine (Ed.), *Job Stress and Burnout: Research, Theory, and Intervention Perspectives*, Beverley Hill: Sage, (1982)
75. Golembiewski, R.T., Munzenrider, R.F., and Stevenson, J.G. (1986): *Stress in organizations: Toward a phase model of Burnout*, Praeger, New York (1986).
76. Harvey, D & Brown, D.R., *An experimental approach to organizational development*, Prentice Hall (2006), 7th
77. Ivancevich, J.M., & Matteson, M.T., *Stress and work: A managerial perspective*.
78. Jex, Steve M., *Stress and job performance: Theory, research, and implications for managerial practice*. Thousand Oaks, CA: Sage Publications Ltd. (1998).
79. Katz, D., & Kahn, R.L., *The social psychology of organization* (2nd ed.). New York: John Wiley (1978).
80. Kornhauser, A., *Mental Health Of The Industrial Worker*. Wiley, New York (1965).
81. Lazarus, R.S. and Folkman, S., *Stress, Appraisal and Coping*. New York: Springer Verlag (1984).
82. Lazarus, R. S., *Stress and Coping: An Anthology* (3rd edn.), New York: Columbia University Press, 1991.
83. Lumsden, D.P., *Towards a systems model of stress: Feedback from Anthropological study of the impact of Ghana's Volta River project* (1975). In I.G. Sarasonans
84. Maddi, S.R. and Kobasa, S.C., *The hardy executive: Health under stress*, Homewood, Illinois: Dow Jones-Irwin (1984).

WEBSITES

85. *Central Civil Services (Classification, Control & Appeal) Rules, 1965*,
86. [http://persmin.nic.in/DOPT/EmployeesCorner/Acts_Rules/ccs\(cca\)/ccstotal1.htm#00](http://persmin.nic.in/DOPT/EmployeesCorner/Acts_Rules/ccs(cca)/ccstotal1.htm#00)
87. *Central secretariat's Manual of Office Procedures, Sept, 2010*
88. http://darpg.nic.in/darpgwebsite_cms/Document/file/CSMOP.pdf
89. *Census of Central Government Employees, October, 2009*
90. <http://dget.gov.in/publications/ccge/ccge-2006.pdf>
91. CGHS- <http://msotransparent.nic.in/cghsnew/index.asp>

92. <http://www.completehost4u.com/~isplindi/wp-content/uploads/2009/05/module-7-.pdf>
93. http://shodhganga.inflibnet.ac.in/bitstream/10603/1029/9/09_chapter%202.pdf
94. *Ministry of Personnel, Public Grievance and Pensions, www.persmin.nic.in*
95. *Rahim, A. & Panicker, R., (2007), Making Dinosaurs Dance: Organization Change in Government, February 2007,*
96. <http://www.ipglobal.com/reports/Making%20Dinosaurs%20Dance%20-0Organisational%20Change%20in%20Government.pdf>
97. *Second Administrative Reforms Commission – Thirteenth Report- November, 2008*
98. <http://arc.gov.in/>
99. *Theodore Roosevelt., U.S. Office of Personnel Management,*
100. <http://www.opm.gov/diversity/guide.PDF>