

## STRESS EXEGESES “A SUMMARY OF THE STRESS DISQUISITIONS”

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**Abstract:** Stress is intuitive and has a familiar sense of all people. Thus anyone can define stress in their own way. Stress has been studied since a very long time and many theories have been put forward by renowned scientists till date. Stress is also one of the most widely researched topics in Organisational Behaviour and Human Resource Management. The stress researches have been done related to organisation, its employees and are still being carried on. This paper attempts to put forward a literature survey on the stress theories and stress related theories that would help a researcher, organisation and students interested in studying stress and stress management. It is based on secondary data collected from the library of Guwahati, Guwahati University of Assam, North East and extensive study from the internet. The study further attempts to put forward suggestions towards the area of research and welcomes an addition to the stress theories and stress related theories for the organisation's and its employee's development.

**Keyword:** Stress Theories, Stress Management, Organisational Development and Employee Benefit.

**Introduction:** Stress is a growing concern among the lives of human be it a teen, adult or elderly. Earlier stress was used in a scientific context. Hardship, adversity and affliction were the only meaning by which stress could be defined. Studies on stress have been very popular since last few decades amongst the behavioural and health science researches. As time passed the concept of stress changed. Now stress is studied with a physical and psychological approach to the individual. Osler in the early 20<sup>th</sup> century wrote a study on angina. His writings equated stress with hard work and strain with worthy. The roles of stressful events were studied by Adolf Meyer in the years 1866-1950. The stressful events discussed by Meyer caused a physical and psychological disorder. The study of life events was triggered from his idea. The various empirical study, transactional research, conceptual study and longitudinal studies were conducted to research on stress, its mode of occurrence, consequences and ways by which stress can be coped. This paper will sketch the theories of stress and theories related to stress.

**Theories of Stress and Theories Related to Stress:** Dr Walter B. Canon of Harvard Medical School was the first researcher to describe the theory of stress, Fight or Flight Theory also known as Acute Stress Response in 1915. He was a physiologist who gradually became interested in physical change and reactions of the body of his lab animals. While researching digestion on his lab animals he noticed physical changes when animals were stressed. This built an interest and he studied the various physiological reactions to stress. According to the theory, our brain activates the nervous system and stimulates the body by mobilising energy for the reaction. Cannon with his associate Philip Bard lays The Emergency Theory in 1920 while researching over the theory of William James and Carl Lange in the years 1884-85. They noticed a missing response and then stated that emotion is a response to stress in their theory. Later

in 1922 Lange and James have come up with the Theory of Emotion defining that an individual's emotional responses depend on the brain's interpretation to the physical reaction. This theory was criticised by many theoreticians including Cannon and Bard. The modern criticism is done by Lisa Feldman Barrett. She points out that there is no one-to-one response in the same situation. She also states that emotional experience is subjective.

Sigmund Freud noted the term ego and defense mechanism. Anna Freud, his daughter, developed those ideas and elaborated it in 1926. She states that the defense mechanisms are repression, denial, projection, displacement, regression and sublimation. Hans Selye an endocrinologist of Hungary in 1936 had finally put forward the Theory of General Adaption Syndrome popularly known as GAS, inspired by Canon's Theory of Flight or Flight. The theory has three response stages- alarm reaction, the resistance phase and exhaustion. In 1971 an American psychologist and researcher of emotion and an endocrine system named John Wayne Mason criticised Selye's stress theory which led to a strong second finding that the stress level in human is mostly the result of cognitive mediation. Since psychologists like Arnold, Janis, Lazarus along with Selye couldn't give a clear definition so Selye defined stress as nonspecific in 1985. Kurt Lewin grounded the idea of person-environment fit popularly known as PE-fit in 1938. He stated that the behaviour is a function of the person in the environment he belongs. Lewin has put forward four fits to the model to understand it better. Person-vocation fit, person-job fit, person-group fit and person-person fit. Other than Lewin several other PE Fits are proposed. The widely known are of Dawis and Lofquist 1984, Rodgers and Cobb 1974, Levi 1972, McGrath 1976 and Pervin 1967.

Theorist Stanley Schachter and Jerome Singer have given The Two Factor Theory of Emotion. They stated

that to identify the emotion, cognitive activity and emotional arousal is necessary. The two factors which the theorist point out are a cognitive label and physical arousal. Theoretician Marshal and Zimbardo criticised this theory. Role Stress Approach or the Michigan Model established by French and Kahn in 1962 at the Michigan University is an extended version of the Person-Environment Fit Model. It exhibits the subjective perception of an individual to the stressors that they encounter. The Model was redefined by Hurrell and McLaney of the U.S National Institute of Occupational Safety and Health in 1988. Kompier in 2003 pointed out the stressors of the model. Henry Alexander Murray, an American psychologist of Harvard University on January 1963 has established a Thematic Appreciation Test (TAT) for measuring personalities. This theory establishes the relation of stress when exposed to interpersonal disputes. The stress is evaluated on personality measures. Thomas Holmes and Richard Rahe have developed a stress measuring scale known as Social Readjustment Rating Scale and tested it in 1970 which could examine the relationship between stressors and coping abilities. They have put forward the Life Event Theory in 1967 and used the SRRS to measure the stress level of the selected sample.

Kagan A R and Levi Lennart, in the year 1971 had put forward a theory on stress named Society, Stress and Disease. In his theory, the various distinctions between stress components are shown in the environment. Meyer Friedman an American cardiologist and R.H Roseman a researcher on March 12, 1974, coined the theory of personality traits by which stress adaption could be easily understood. In 1976 they carried out an empirical research to measure the hypothesis of the personality traits coined by them. In 1988 Ragaland and Brand carried out a longitudinal study on the personality traits. Robert A Karasek has put forward the theory of demand/control model- a social, emotional and psychological approach to stress risk and active behavioural development that portrays work related to occupational stress in 1976. In his model, he shows the job's demand from its employees and how the employees control their responsibility. Johnson expanded this model in 1986. He has added the third dimension known as social support. Spring and Zubin in 1977 have developed a model known as the Vulnerability-Stress Model showing an interaction between an individual's vulnerability, stressors they are exposed to and coping ability. Rick E Ingram and David D Luxton of Kansas University in 2005 have developed the concept of the Vulnerability-Stress Model. It is also known as Vulnerability-Stress Coping Model. Cox has developed the Transactional Model of Work/Occupational Stress in 1978. The framework of the model consists of five stages where

each represents stress on its way. Heinz Walter Khrono of Johannes Gutenberg University has put forward a theory of individual differences in coping up stress and anxiety in 1978. This theory puts forward the cognitive coping strategies. An occupational stress theory was established by Beehr and John Newman in 1978 known as the meta-model facet theory of occupational stress to describe the workplace stress. This model basically describes the relationship among the stress and non-stress variables that were found in the literature of that time. The Lazarus theory, popularly known as the Theory of Psychological Stress was put forward by Lazarus with his colleague Launier in 1978. The theory states the transactional process between environment and human behaviour. In 1984 Lazarus and Folkman had developed a new theory on stress known as the Theory of Cognitive Appraisal which describes that stress was a two-way process. In 1991 he regarded stress as a relational concept. Suzanne C. Kobasa has introduced the concept of psychological Hardiness in 1979 suggesting that the relationship between stressful events and illness is moderated by hardiness. Allen D. Kanner is a psychologist in the field of ecopsychology in 1981 made a comparison of two modes of stress measurement and had developed a Micro/Macro Stress Model. His model describes that stress can affect all of us. Joseph E. McGrath in January 1982 has described the methodical issues in stress research. Dominant issues like objective and subjective measurement of stress, coping variables, psychological and physiological variables were described by McGrath. Susan Roth and Lawren J. Cohen in 1982 have developed a theory on Approach, Avoidance and Coping with Stress. This theory describes that the study of stress comprises of two concepts approach and avoidance. An ideal way of coping with stress is also presented. Winfried Hacker in 1982 has put forward the Action Regulation Theory. This theory was developed to describe the modeling for work condition. ART helps to understand the importance of work activity to reduce work stress as timely or scheduled activity with a better productive output. In 2003, ART was expanded by Hacker where he described ART as a tool to design modern work process. Vitamin model of stress was developed by Peter Warr in 1987. The stress model proposed that there are certain job characteristics that can cause mental illness and the vitamins can help the individual overcome such illness. In 1998 Bunk and in 2003 Sonnentag, Frese had stated that the evidence of the model is inconclusive. In 2007 Warr have cited that the model helps to find the various job characteristic affecting the well-being of the employees resulting in stress and strain. Conservation of Resources Theory/Model (COR) was developed by Steven E. Hobfall, an American

Psychologist from Kent State University in 1989. According to the theory, stress occurs when the resources of an individual are lost or has a threat of loss. Steven Hobfall, John R Freedy, Bonnie L Green and Susan D Solomon have together described the way to examine the coping the resources mentioned in COR in 1996. The Biopsychosocial Stress Model by Larry C. Bernard and Edward Krupat helps us to understand and address stress. In 1994 they have laid down the theory with three systems: biological, psychological and social. This model is said to be one of the most comprehensive models of stress as it presumes that the three systems should be handled together. In 1996, Johannes Siegrist has developed the Effort-Reward Imbalance Model of Stress. This model is based on two important components; effort and reward showing its relation to stress. In 1986 the ERI Model of Stress was expanded explaining the cardiovascular-related outcomes due to stress. Cybernetic Theory of Stress was developed by J R Edwards in 1998. This theory is related to stress, coping and well-being of employees. Norbert Wiener was the first scientist to define cybernetics in 1948. The term cybernetics explains how the self-regulatory system of the body functions by maintaining a state of constancy. The theory explains that stress can be caused by the relationship of perception and social information. Joseph E. McGrath an American social psychologist and Ellen I. Shupe in 2000 have described stress and have developed the Dynamic Adaptive Process Theory. This is a general theory of stress and coping in a workplace. The theory explains that stress consists of four cycles; a situation, a perceived situation, the response selection and coping behaviour. In 1997 Shupe has tested and modified the model presenting that both stress cycle and overall system stress is important. Nelson and Simmons in 2003 have developed the Holistic Model of Stress. This theory puts forward the

positive qualities of eustress. This model of stress also focuses on the positive responses on health. J. De Jonge, Christian Dormann and M. Van Den Tooren have developed the Demand-Induced Strain Compensation Model in 2003. This model is a theoretical job stress and performance model revealing the effects of stress due to high job demand and compensations. Three-Part Model of Partially Mediated Stress was developed by Goldenhar in 2003. This model shows the relationship between job stressors and injury outcome. The three parts of the model were job stressors, psychological & physical symptom and injury/near misses. The job stressors are used as predictor variables. Holger Ursin of Bergen University, in 2004 has developed the Cognitive Activation Theory of Stress. This is a systematic formal theory of the relationship between challenges and ways to cope such challenges. The theory describes stress and its effect in four domains like physiology, behaviour, subjective experience and cognitive function.

**Conclusion:** The numerous theories of stress and theories related to stress provides a dynamic view of the stress process, the importance of the concept stress, contribution of the people in creating organisational stress and person's demand to annihilate job stress through proper measurement and management practices. Though the different theories have its own and different perspective, their main aim is to show the person and environment's relation to stress and how can this be lessened from the lives of the people. In the future researches, the theories of stress can help to bring the continuity in developing the understanding process of stress among people. Measuring the stress coping strategies and developing the measures to fit the current stressors would be a helpful involvement in the discipline of stress research.

## References:

1. Anna Freud, *The Ego and the mechanisms of defense*, Institute of Psycho-Analysis, London, 1937.
2. Arnold, J., Cooper, C. L., & Robertson, I. T. *Understanding human behaviour in the workplace* (2nd Ed.) London, 1995.
3. Beehr and Newman, *Job stress, employee health and organizational effectiveness*, *Personal Psychology*, 1978, 665-669.
4. Cooper, C. L., Dewe, P.J., & O'Driscoll, M.P., *Organizational Stress: A Review and Critique of Theory*, (2001).
5. Cox, T., *Stress, coping and problem solving*. *Work & Stress*, (1987), 1, 5-14
6. Cox & Mackay, *A Transactional approach to occupational stress*, 1981.
7. Cohen S. *Stress, social support, and disorder*. In: Veiel HOF, Baumann U, Eds. *The meaning and measurement of social support*. New York: Hemisphere Publishing, 1992: 109-124.
8. De Jonge, J., & Dormann, C., *The DISC model: Demand-induced strain compensation mechanisms in job stress*. In M. F. Dollard, H. R. Winefield, & A. H. Winefield (Eds.), *Occupational stress in the service professions*, London, (2003), 43-74.

9. Dr. Khanka, S.S, edition fourth, Organisational Behaviour, S. Chand & Company Ltd, Ram Nagar, New Delhi.
10. Edwards, JR. The determinants and consequences of coping with stress. In *Causes, Coping and Consequences of Stress at Work*, edited by CL Cooper and R Payne. New York, 1988.
11. Folkman, S., & Lazarus, R.S., An Analysis of coping in a Middle Aged Community sample. *Journal of Health and Social Behaviour*, (1980), 21, 219-239.
12. Folkman, S., Personal control and stress and coping processes: A theoretical analysis, *Journal of Personality and Social Psychology*, (1984), 46, 839-852.
13. Griffiths, A., R. C. McCaig and M. J. Harrington (Eds.) *The changing nature of occupational health*, (1998), 213-232.
14. Hinkle LE Jr. The concept of "stress" in the biological and social sciences. Pg no 31-48.
15. Karasek, R., Job demands, job decision latitude and mental strain: Implications for job redesign, *Administrative Science Quarterly*, 1979, 24, 285-306.
16. Karasek, R.A, Demand/Control Model, in J. Stellman (Ed.). *Encyclopedia of Occupational Health and Safety*. Geneva: ILO, 1998, 34.6-34.14.
17. Kagan, A and L Levi. Adaptation of the psychosocial environment to man's abilities and needs. In *Society, Stress and Disease*, edited by L Levi. New York, 1971.
18. Krohne, H W, Spielberger and I G Sarason (Eds), *Stress and Anxiety*, Washington DC, Vol.5. (1978), (pp. 233-260).
19. Kobasa, S. C., "Stressful life events, personality, and health - Inquiry into hardiness". *Journal of Personality and Social Psychology*, (1979), 37 (1): 1-11
20. Kompier, M., Job Design and Well-being. In M. Schabracq, J. Winnubst & C.L. Cooper, (Eds.), *Handbook of Work and Health Psychology*, (2003), 429-454
21. Mamoria, C.B, "Dynamics Of Industrial Relation", Himalaya Publishing House.
22. David D. Luxton And Rick E. Ingram, Uncertain Self-Esteem And Future Thinking in Depression Vulnerability, *Journal of Social and Clinical Psychology*, Vol. 25, 2006, pp. 840-854
23. Sigmund Freud, the ego and the id, standard edition, 1923, 19, pg-1-66.
24. Siegrist J, & Peter, R., The effort-reward imbalance model, 2000, pg no 83-87.
25. Schachter, S. and Singer, J. E. Cognitive, social and physiological determinants of emotional states, *Psychological Review*, 1962; 69: 379-399
26. Van der Doef, M. & Maes, S., The Job-Demand (-Support) Model and psychological well-being: a review of 20 years of empirical research, *Work & Stress*, 1999, 13, 87-114.
27. Warr, P.B. 1987, *Work, unemployment, and mental health*. Oxford
28. Winfried Hacker, Action Regulation Theory, *EUROPEAN Journal Of Work And Organizational Psychology*, 2003, 12 (2), 105-130
29. Zubin, J., & Spring, B., Vulnerability - a new view of schizophrenia. *Journal of Abnormal Psychology*, 1977, 86(2), 103-124.

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