



Occupational Stress and Employees Productivity in the Workplace

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Abstract

The rise in stress is seen across all spheres of life, especially in the workplace. Stress in manufacturing industry, oil industry and service industry is a wide-spread trend (occurrence) with far-reaching practical and economic consequences. Employees' productivity can be hindered significantly by high levels of stress experiences in the work environment. Occupational stress is an adaptive response to an external situation that results in physical, psychological and behavioral deviation for the organizational participant. Therefore this paper discusses sources and consequences of stress. It concludes that stress can be managed in spite of the hazards caused by it.

Keywords: Occupational Stress, Employee, Productivity, Workplace.

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INTRODUCTION

The place of work; be it an office or a factory, a business or any other organization, is not just a setup where people get paid for their presence and attendance of a few hours. The salary is in return for work done and the amount of work completed reflects the worker's productivity; which in turn is determined by a series of factors besides qualifications and experience. The level of the employee's productivity in any organization is largely responsible for the profit making ability of the organization and its survival in the long run. That is why Executives owe it to the organization and to their fellow workers not to tolerate non performing individuals in important jobs (Martins, n.d). However, companies want to improve employee productivity, but how often do they examine their own management practices as a means of attaining it? (Lipman, 2013).

Business organizations strive to optimize their objectives which range from maximization of benefits to cost minimization. One thing that is common to every organization is the desire for high productivity through employees whether in the manufacturing industry, service organization or in the oil sector. Profit is a measure of excess amount earned over expenses. To make this work, the management must establish an environment in which people can work productively without stress. Productivity is an output-input ratio within a time period with due consideration for quality. This means: Productivity = output/input (within a time period), quality important. From the formula, productivity can be improved by 3 conditions:

- Increasing outputs and decreasing inputs to change the ratio;
- Increasing outputs with the same inputs;
- Decreasing inputs but maintaining the outputs.

Organizations use several types of inputs, such as manpower, materials and capital (Iqbal, 2013a). Productivity improvement programmes can be achieved at the workers level. Workplace stress causes loss of productivity, loss of efficiency, increased employee absenteeism, and many other problems. Employees in an organization undergoing change may experience increased levels of workplace stress if they perceive that they are unable to cope with the demands made on them as a result of the organizational changes implemented. (Iqbal, 2013b). Consequently, it could be presumed that motivation and stress management play important role in productivity. According to the free meridian Webster, stress is what you feel when you have handled more than you are used to, or stress represents anything that poses a threat, a challenge to our well-being. Simply defined, stress is a reaction to a stimulus that disturbs our physical or mental equilibrium. Stress is also a state of mental tension and worry caused by problems in life, etc.

NATURE OF STRESS

Stress is not tangible and cannot be touched. This makes it a complex phenomenon. According to Bowin and Harvey (2001), stress occurs with the interaction between an individual and the environment which produces emotional strain affecting a person's physical and mental condition. Stress is caused by stressors, which are events that create a state of disequilibrium within an individual.

Blumenthal (2003), opined that stress is anything that upsets people's ability to maintain critical variables (which can be social, psychological, spiritual or biological in nature) within acceptable limits. The experience of stress involves an event that is demanding or resources as well as the subjective feeling of distress experienced in its face. An event could be experienced as stressful if people evaluated it as distressing. Whether an event is experienced as stressful depends on a person's psychosocial orientation with things like culture, spirituality, values, beliefs and past experiences influencing the appraisal.

Events that are appraised as being overwhelming, threatening, unsatisfying or confliction are more likely to be experienced as stressful. Scientists and medical practitioners viewed that the accumulation of stress products in the body, over a prolonged period, can be devastating and could play a crucial role in degenerative processes like ulcer and cardiac diseases. Chronic distress would reduce a person's overall physical, mental and spiritual well-being. It is normal for a person, who is stressed, to experience a loss of appetite, disturbed sleep patterns, excessive and disturbed feelings of anxiety, fear, negativity and even deep depression as well as being subject to a variety of physical symptoms. An overload of stress reduces effectiveness and is highly immune – suppressive.

STRESS PROCESS OR RESPONSE STAGES

The degree to which people experience stress vary from one individual to another. Stress (whether eu-stress or distress) do not develop overnight but it creeps into human system gradually until it gets to the stage when it becomes fully blown and its damaging effect then becomes manifested. According Levi (1970) and

Selye in Oyetimein (2009) the following three stages can be identified in the development of stress: ALARM STAGE (Acute stress) → RESISTANCE STAGE (Prolong stress) → EXHAUSTION STAGE.

Alarm is the first stage development. During this stage adrenaline will be produced in order to bring about the fight. Every part of the human organ experience minor changes. At this stage the heart beat of the individual increases and breathing becomes faster. The blood pressure of the individual increases, the eye pupil dilates and digestion is inhibited. Rest and recovery, use of some medication may bring the condition under control. The ultimate of this stage is to counter attack, neutralize or reverse the effect of acute stress.

The resistance stage is where the body has to decide to fight or flight. The body will try to add resources to help it cope through maximum adaption and hopefully, successful return to equilibrium for the individual. If however, the defense mechanism breakdown completely, this will lead to the third stage which is exhaustion. See the figure 1.

Phases in Stress Development

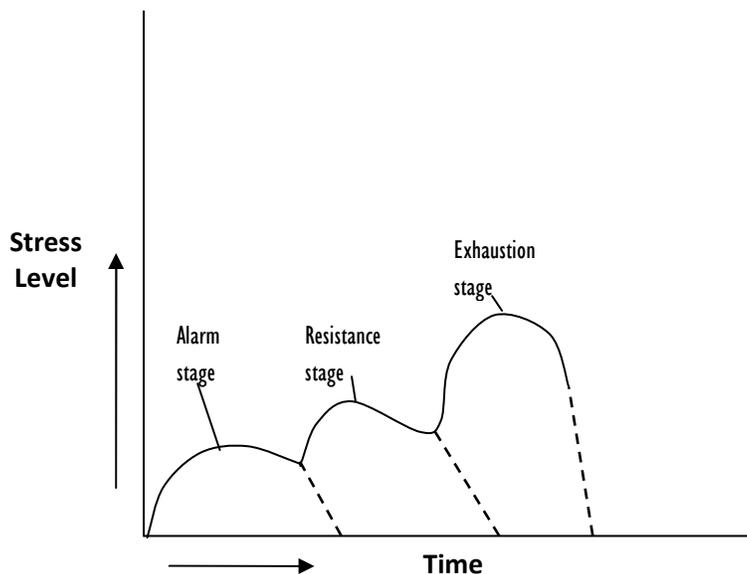


Figure 1. Phases in stress development: dotted lines show possible reduction in stress level.
Source: Oyetimein (2009, p. 32), Executive Stress Management: A Contemporary Approach.

Exhaustion stage is the third and final stage. At this point, all the body's resources are eventually depleted and the body is unable to maintain normal function because elastic limit is exceeded. The repercussions are serious nervous or psychological and physical breakdown. These stages in the manifestation of stress exist over a period of time. The result can manifest itself in obvious illness such as ulcers, depression, diabetes or even cardiovascular problems, along with other mental illnesses.

Blumenthal (2003) differentiated different effects of stress as follows:

- Subjective effect: This leads to anxiety, depression, frustration, fatigue and low self-esteem.
- Behavioral effects: leads to accident proneness, impaired speech, restlessness and forgetfulness.
- Cognitive effects: stress that affects our thought process leading to difficulty or fear of making decisions, forgetfulness, hypersensitivity, mental blocks and difficulty concentrating or thinking clearly. This may be intensified by substances abuse.
- Physiological responses: this begins in the brain and spread to organs throughout the body. Catecholamine from the adrenaline medulla causes kidneys to raise blood pressure and the liver releases sugar into blood stream. The pituitary gland stimulates the release of corticosteroid, which

helps to resist stress but if this is in the system for a prolonged period of time, it suppresses the immune system. These responses are adaptive for dealing with stress in the form of “fight or flight” but this response is rarely useful in urban work area. The accumulation of stress product in the body is immune – suppressive playing a part in degenerative processes and diseases.

- Effects on health: prolonged exposure to stress has profound and detrimental effects on health. Among possible complications, stress may play a role in causing ailments like asthma, amenorrhea, coronary heart disease, chest pains, diarrhea, dyspepsia, headaches, migraines, diabetes mellitus, ulcers and decreased libido. In a world where AIDS is frighteningly prevalent, people need to be aware that stress is immuno-suppressive. HIV breaks down a person’s immune system, which leaves them vulnerable to potential infections and diseases.

The above statement corroborated the four psychiatric states of affairs analyzed by Ilfeld in Dar, Almal, Maseem and Khan (2011).

- Depression: frequently feeling lonely, fed up, dejected or low in energy; loss of sexual desire;
- Having thoughts of possibility of terminating one’s life; anxiety; frequency of upset or sour stomach, feeling dim or dizzy, hand trebling, avoiding things, and feeling afraid or fearful;
- Cognitive disturbance: frequently experiencing difficulty in remembering things or concentrating, mind going blank;
- Anger: regularly losing temper; feeling simply annoyed, irritated, or critical of others and getting angry over less important things.

According to Selye in Oyetimein (2009) in his theory on General Adaptation Syndrome (GAS) observed that even though the number and types of stressors to the human body are numerous and varied, the body tends to react in a unitary way to each stressful situation. Indeed most behavioral theorists are of the view that the following differences are noticeable in the personality of people.

Table 1: Behavioral Traits

TYPE A PERSONALITIES	TYPE B PERSONALITIES
Workaholic, impatient, very competitive and always in a hurry	Work regular hours and calm
Work to be recognized by others	Tries to satisfy self and never in a hurry
Striving on the job and fast doing things	Easy going and do one thing at a time.
Easily get angry and forceful in speech with tendency to bottle up feelings.	Rarely angry and slow in speech
	Expresses feeling easily and not competitive.

Whether extrovert or introvert TYPE A personalities tend to act fast and are impatient with work details. Usually interested in getting jobs done quickly without thinking about who did the job, how he did it etc, while TYPE B personalities are more self oriented, prefer working on one project at a time. The personality type to which employee belong has implication for career choice, relationships, work behavior and proneness or otherwise to stress. TYPE A personality are stress prone because they are achievement oriented. In event of failure TYPE A are more stressed than those in TYPE B personality.

SOURCES AND TYPES OF STRESS AT WORK

The causes of stress are not only numerous but they are complex and inextricably inter woven. The causes of stress can be either due to remote or immediate factors; they can also be externally induced or as a result of

forces operating within the individual. External factors are forces from the macro environment or from the micro organization which act as stressors upon the individual. Endogenous forces operate within the individual and are made up of such factors like personality traits, psychological features such as attitude, emotional disposition, inferiority or superiority complex, introversion or extroversion etc.

Exogenous (external causes) include socio – political, cultural, religious, economic organizational structure, climate and career development policy. Since people differ widely in age, economic position and level of maturity, people react differently to situation. What might be more stressful to one person may be less to another person. A stress – free life would only exist if the environment places no demand whatsoever upon us and if we have no needs of our own to fulfill.

According to Cooper (1985), there are four categories of causes of stress and three categories of consequences of job stress, which are given in figure 2.

CAUSES OF STRESS

CONSEQUENCES OF STRESS

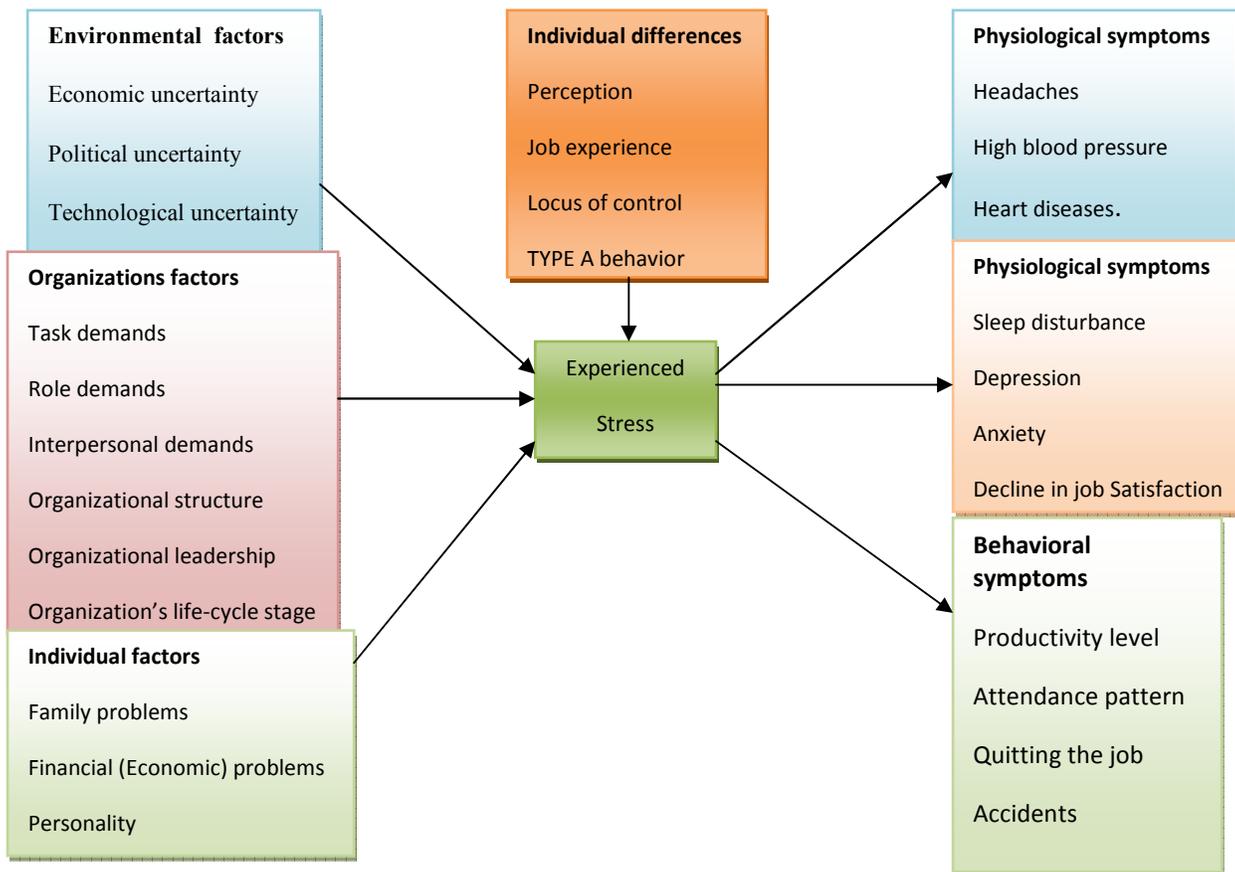


Figure 2: The stress model

Repetti (1990), McGonagle and Kessler (1990), Pervin (1993) agree with Arnold, Robertson and Cooper (1993) in discussion on the causes or sources of stress. Arnold, Robertson and Cooper (1993), and Mark (2012), identified five major causes of work stress which are: factors intrinsic to the job, role in the organization, relationship at work, career development, organizational structure and climate.

TYPES OF STRESS

According Taylor (1995), there are four major types of stress, which she explains as follows:

Acute stress: This type of stress is the most common and most recognizable form of stress. This is the kind of stress which the individual knows exactly why he is stressed. Normally, the body rests when these stressful events cease and life gets back to normal because the effects are short-term. Acute stress usually does not cause severe or permanent damage to the body.

Traumatic stress: It is a severe stress reaction that results from a catastrophic event or intense experience such a natural disaster, sexual assault, life-threatening accidents, or participation in a combat. Here, after the initial shock and emotional fallout, many trauma victims gradually begin to recover. But for some people, the psychological and physical symptoms triggered by the trauma do not go away. The body does not return to equilibrium, and life does not return to normal. This condition is known as post trauma stress disorder. Common symptoms of this type of stress are flashbacks or nightmares about the trauma, avoidance of places and things associated with the trauma, hyper vigilance for signs of danger and irritability and tension.

Chronic stress: She describes this type of stress as unrelenting demands and pressures seemingly interminable periods of time. This stress wears the individual down day after day and year after year with no visible escape. It grinds away both emotional and health of the individual leading to breakdown and even death.

Episodic acute stress: This episodic acute stress is a situation where the individual's life experiencing this type of stress are very chaotic, out of controlled and they always seem to be facing multiple stressful situation. They are always in a rush, always late, always taking on too many projects, handling too many demands. Those who are prone to this type of stress include "TYPE A" personality. If an individual is prone to episodic acute stress, he may not know it or admit it. He may be wedded to a life style that promotes stress. Unfortunately, people with episodic acute stress may find it so habitual that they resist changing their lifestyle until they experience severe physical symptoms.

THE IMPACT OF STRESS ON PRODUCTIVITY

Work-related stresses may be responsible for organizational outcomes such as decline in performance, dissatisfaction, lack of motivation and commitment, and an increase in absenteeism and turnover. According to Chase and Aquilano in Mark (2012), productivity is measured in terms of outputs per labour hour. However this measurement does not ensure that the firm will make money (for example when extra output is not sold, but accumulated as inventory). To test whether productivity has increased, the following questions should be asked: 'has the action taken increased output or has it decreased inventory?' "Has the action taken decreased operational expense?" This would then lead to a new definition which is: productivity is all the actions that bring a company closer to its goals.

Mathis and Jackson (2000) defined productivity as a measure of the quantity and quality of work done considering the cost of the resource it took to do the work. Steers (1991) opined that from a managerial stand point it is useful to consider several forms of counterproductive behavior that are known to result from prolonged occupational stress. Thompson and MC Hugh (1995) are of the opinion that when specifically regarding stress in the workplace, contemporary accounts of the stress "process" often follow the notion of stress as resulting from a misfit between an individual and their particular environment, where internal or external factors push the individual adaptive capacities beyond his or her limit.

According to Blumenthal (2003) an inverted u-type curve has been used to depict the effect stress has on productivity. It can be shown that, as stress increases, so does the productivity will peak and start to decline. This shows that stress is necessary to enhance productivity but once it reaches a level of acute discomfort, it is harmful and counterproductive. He further argued that excess occupational stress is harmful, destructive and detrimental to human well-being and productivity.

MANAGING STRESS

Individuals may try to reduce stress through better management of their time, through prioritizing activities by importance and urgency, as well as scheduling activities according to the priority set. According to Robbins (2004), stress can be managed in two approaches: individual and organizational approaches.

An individual therapeutic device for managing stress is by adopting any or combination of the following:

- Tranquilizer and drugs
- Time / self management
- Meditation
- Body scanning / individual opening up to others.
- Refuting irrational thoughts
- Progressive relaxation techniques
- Music
- Exercises / physical fitness
- Prayers and praise
- Jokes
- Nutrition and weight control
- Social institution / extended family
- Stress inoculation

Organization approach to stress management includes training programmes for employees, ensuring effective upward and downward communication in organization, improvement in personal policies such as (good welfare packages, incentives, pension schemes). Good job design by improvement in the physical work environment (HSE) and also management should provide technical support to employees. In addition management should allow more flexible working hours and provide recreational facilities for indoor and outdoor games.

Oyetimein (2009) added another dimension to the above which he called defense mechanism: these are unconscious strategies used to protect oneself from problems, difficulties, failures and other sources of stress. By using defense mechanism the individual tends to cope by concealing stress and adopting rationalization as alternative to actual management of problem.

The methods used in managing stress include repression, suppression, rationalization fantasy, displacement and denial:

Repression: pushing stressful, anxiety producing thoughts or impulses out of conscious awareness.

Suppression: the individual voluntarily tries to forget and push off unpleasant events from consciousness. This is done to eliminate the stress, worries and tension which such events cause.

Rationalization: this is used to distort reality in an effort at justifying thoughts, feelings and events that make one uncomfortable. Rather than feeling guilty, unhappy and worried about the outcome of an event, people tend to rationalize to justify their behavior.

Fantasy: the individual rather than experiencing stress gratifies his desires by imagining satisfying events and achievements.

Displacement: the individual discharges negative feelings or thoughts regarding a more threatening powerful person onto a weaker one.

Denial: complete refusal to accept or perceive reality. This temporarily protects us from painful and unpleasant circumstances but it does not change reality.

Also Claude and Cole (1992) suggested that in order to manage occupational stress effectively, management should consider doing the following:

- Provide work which allows some personal choice in the way it is carried out and the sequence in which it is carried out;
- Encourage employees' participation in decision which affect them;
- Set clear goals and targets and provide adequate feedback on performance;
- Induct new recruits thoroughly;
- Provide training as an on-going updating process;
- Provide consistent rewards for effective output;
- Review performance gaps at the time of occurrence;
- Provide opportunities for employees to try new duties and different task;
- Design job to have even work pressures;
- Encourage group working procedures and friendly work relations;
- Provide secure and fair personal practices;
- Ensure work environment is free of hazards.

This implies that if the approaches and measures outlined above are carefully implemented they could go along way to minimize the level of stress on employees.

CONCLUSION

It is understandable that in every organization certain percentage of the working population suffers from occupational stress but occupational stress should not be taken as individual problem. If organizational management considers occupational stress as individual problem and not management problem, then they have to face loss due to absenteeism, quitting of jobs, total cost of work-related accidents and low quality work. Therefore, organizations should handle occupational stress positively to increase productivity. This study concludes that workplace stress has negative relations with the organizational productivity.

REFERENCES

- Arnold, I., Cooper, L., & Robertson I. T. (1991), *Work Psychology*. London: Pitman Publishers.
- Blumenthal, T. (2003), Services SETA. Employee Assistance Conference Programme 2 (2). pp5 – 21.
- Bowin, R. B., & Harvey, D. (2001). *Human Resource Management: An Experiential Approach*. 2nd Ed. New Jersey, Prentice hall.
- Brief, A. P., & Weis, S. H. M. (2002). Organizational Behavior: Affect in the Workplace. *Annual Review of Psychology*, 53, 279- 307.
- Chase, R. B., & Aquilano, N. I. (1995). *Production and Operations Management: Manufacturing and Service*. USA, Van and Hoffmann Press.
- Claude S., George, J., & Kris, C. (1992) *Supervision Action*, Australia, Macpherson's Group.
- Cooper, C. (1985). *The Stress of Work: Aviation, space and environmental medicine* (July)
- Dcsgaumail, V. (2003), *Work Stress Management and Prevention*. <http://dcsgaumail.02.dsc.gov.za/exchange>.
- Dean, C (2002). *Stress and Work Performance*. HR futures.
- Henry, O., & Evans, A. J (2008). Occupational Stress in Organizations. *Journal of Management Research*, 8(3), 123-135.
- Dar, L., Almal, A., Maseem, M. A., & Khan, K. U. D. (2011). Impact of Stress on Employees Job Performance in Business Sector of Pakistan. *Global journal of management and business research*, 11(6), 1-4.

- Iqbal, M. (2013a). Mediatonal Effect of Stress Coping Strategies between Workplace Stress and Organizational Performance: A Case Study of Air Traffic Controllers of Pakistan. *European Journal of Management Sciences*, 1(1), 42-56.
- Iqbal, M. (2013b). Job Control Mediates between Workplace Stress and Organizational Performance: A case study of Air Traffic Controllers of Pakistan. *Journal of Contemporary Management*, 2, 89-98.
- Lipman, V. (2013). 7 Management Practices That Can Improve Employee Productivity. Retrieved June 1, 2014 from <http://www.forbes.com/sites/victorlipman/2013/06/17/7-management-practices-that-can-improve-employee-productivity/>.
- Mark, A. D. (2012). Stress and its Effect on Employees Productivity. A Research Project Kwame Nkorunah University of Science and Technology Ghana.
- Martins, A. T. (n.d). 12 Simple Ways to Improve Employees Productivity. Retrieved May 30, 2014 from <http://www.mytopbusinessideas.com/ways-to-improve-employees-productivity/>.
- Mathis, R, L., & Jackson, J. H (2000). *Human Resources Management*. Ohio: South Western Collage Publishing.
- New Webster Dictionary of the English Language (1985) Levicon publications.
- Occupational stress online <http://en.wikipedia.org/wiki/occupationalstress>.
- Oyetimein, C. F. (2009). *Executive Stress Management: A Contemporary Approach*. 2nd edition. Ibafo, Premium Management: Training and Consultancy Services.
- Pervin, K. (1992). *Personnel Management*, England, Stanley: Thornes Publisher.
- Repetti, M. (1990). *Organizational Behavior*, New York, McGraw-Hill.
- Robbins, (2004). *Organization Behavior*. 11th Edition, New Jersey, Pearson Prentice Hall.
- Taylor, S (1995). *Managing People at Work*. London: Reed Educational and Professional Publishing.
- Tennant, C. (2001). Work-Related Stress and Depressive Disorders. *Journal of Psychosomatic Research*, 51(5), 697–704

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