Psycho-Physiological Problems among Dual Career Women: A Cause of Stress

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Abstract
As women enter the workforce, they face some physical and psychological stress in the work environment. They have to bear pressure created by the multiple roles they have to play in conflicting situations, which may adversely affect their job performance. A large number of working women observed difficulty in balancing work and family. Keeping in mind the above situation, the study was planned with the objective to study the perceived sources of stress on physiological and psychological aspects and to suggest possible approaches to stress management. An experimental research design was chosen. Nearby areas of institutions or establishment were selected for the study and the purposive sampling design was used to select the study area and the sample size. A total sample of 80 respondents having equal representatives (20 each) from the four institutions was taken. The major issue was that women with high ranks in institutions and banks are more exposed to stress related problems than their counterparts. In case of psychological parameters, aptitude test and letter cancellation was done and found that the performance of the workers reduce in the evening as compare to morning which altogether shows the physical as well as psychological stress among them.

Keywords: Role Stress, Dual Role, Physiological Responses

Introduction
The modern world, which is said to be a world of achievements, is also a world of stress (Tyagi and Sen, 2000). Stress appears a prevalent clinical problem and a concomitant of all clinical pathologies. Chronic emotional stress can lead to such psychophysiological illness as ulcer, asthma, hypertension and heart diseases. It can impair the immune system and can prevent the body from fighting antigens such as bacteria, fungi and viruses. The costs of stress in terms of human suffering, social occupational impairment and illness are numerous. Thus the need to understand the term stress, sources/causes and ways of managing stress among working class women.

Stress is man’s experiences when he is under pressure and feels unable to cope with the situation. Stress is a state that occurs which an individual perceive events to strain his/her coping capacities and threaten our well being, Lazarus (2000). Baron (2000) defines stress as the physical, psychological and behavioural reactions experienced by individuals in situations where they feel that their ability to cope may soon be overwhelmed. Wood and Wood (1999) see stress as the physiological and psychological response to a condition that threatens or challenges a person and requires some form of adaption or adjustment. It is also the external factors that leads to ‘wear and tear’ in the body. Stress is the way human being react both physical and mentally to changes, events and situations in their lives (Ayala, 2002). Neeves in Agulanna (2001) defined stress as the way human beings respond to conditions that score, threaten, anger or excite them, when these conditions persist there is a tendency for an
occurrence of fatigue, breakdown in the human perceptual mechanism or even damage to the system of the body which can result in mental and physical failure that this study is trying to discuss.

Stress is also refers to the reaction of an individual to disturbing events in the environment. This approach treats stress as a response focusing on people’s reaction to stressors.

David and Smith (2008) stated that while dual career women frequently provide psychological compensations and financial benefits, multiple roles may cause stress which in turn generates strains and work discord especially when work and family life interfere with each other. Stress among the dual career women commonly results from work-overload, role conflict and role ambiguity which in turn result to work-family conflict. Job-related stress poses a threat to physical and psychological health. Job-related stress is the harmful physical, emotional responses that occur when the requirements of the job doesn't match the capabilities, resources or needs of the worker. It can lead to poor health and even injury to understand the occupational aspects of health, the study of women’s work and its effects in terms of physical and mental health of the women. Therefore there is the need to study the work-related stress of dual career women with the following objectives:

- To study the effect of stress on physiological and psychological parameters
- To suggest possible approach to stress management

Hypothesis

There is no significant difference between the physiological and psychological stress suffered by working class women.

Population

Four sectors were chosen for the study, Federal Medical Centre Owerri, Alvan Ikoku Federal University of Education Owerri, Lifespring Private Hospital Owerri and Imo State University, Owerri. 80 subjects comprising 20 females from each institution were randomly selected. Purposive random sampling design was used to select the study area and respondents. For collection of data, total sample size of 80, 20 from each institution. The age of the subjects ranged between 25 years and 65 with a mean age of 42.5.

Instrument /Selection of Tools

Experimental research design was used to carry out the study. Physiological tables were developed to assess the blood pressure, pulse rate from blood pressure monitory, respiratory rate by self-counting of number of inhale and exhale and body temperature with the use of doctor’s thermometer and the readings were noted on a morning, evening basis. For psychological stress, aptitude and letter cancellation test were taken which shows the impact of stress among dual career women.

Aptitude Test: The aptitude sheet consisted of different questions related to analogy, dissimilarity and code making in total of twenty questions to be answered in five minutes. On the basis of the question and the corrected responses, the percentage scores were calculated differently for morning and evening.

Letter Cancellation Test: The sheet was made of a random block of alphabets (A – Z). The respondents were asked to cancel out total number of one target alphabet at a time in a given period of time. Also they were asked to cancel five different alphabets and put down their responses. The test was done both morning and evening.

Results/Discussion

Effects of Stress on Physiological Parameter
French (2000) indicated that social support moderated the association between job stressors and physiological outcomes (blood pressure, hypertension). The physiology data was collected both morning and evening basis. The difference was calculated using means as well as standard deviation.

**Blood Pressure:** According to Guimont (2006) cumulative exposure to job stress resulted in significant increase in systolic blood pressure among white collar workers especially those with low levels of social support at work. High blood pressure increases the risks of cardiovascular diseases. In this study the most affected group in the women working in private sectors as they were having maximum increase in the readings from morning to evening and the difference were 79mmHg followed by Bank/Lic 6.99mmHg and the school teachers 5.66.

**Pulse pressure:** This is the difference between the systolic and diasystolic pressure. The average blood pressure of a young adult is 40mmHg. Cooper (2006) reported that increase heart rates raised pulse pressures because of stress. Individual affected in the study are the women working in private sector as well as school teachers based on the maximum increase in the readings from morning to evening and the difference was 5.0mmHg, followed by school teacher and clerical staff.

**Temperature:** This implies the temperature of the deep tissues of the body. The normal body temperature ranges from 36.7°C (98.0°F) to 37°C (98.6°F). In the study, it was discovered that the changes in temperature were more among the women working in bank as the difference in the reading was 0.56°F.

**Table 1: Physiological Effects of Stress**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>School/Teachers</th>
<th>Bank/LIC</th>
<th>Clerical F. M. C.</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morning</td>
<td>93.99 (10.38)</td>
<td>90.33 (6.27)</td>
<td>93.99 (6.8)</td>
<td>90.33 (6.9)</td>
</tr>
<tr>
<td>Evening</td>
<td>99.66 (10.56)</td>
<td>97.33 (4.50)</td>
<td>97.66 (7.1)</td>
<td>98.33 (7.2)</td>
</tr>
<tr>
<td>Difference pulse rate</td>
<td>5.66 (3.24)</td>
<td>6.99 (2.17)</td>
<td>3.66 (4.3)</td>
<td>7.99 (0.75)</td>
</tr>
<tr>
<td>Morning</td>
<td>33 (8.3)</td>
<td>34 (9.6)</td>
<td>36 (5.4)</td>
<td>34 (4.1)</td>
</tr>
<tr>
<td>Evening</td>
<td>32 (9.0)</td>
<td>34 (11.4)</td>
<td>35 (6.1)</td>
<td>31 (6.5)</td>
</tr>
<tr>
<td>Difference Temperature</td>
<td>5 (3.5)</td>
<td>2 (2.7)</td>
<td>3 (2.7)</td>
<td>5 (0)</td>
</tr>
<tr>
<td>Morning</td>
<td>98.00 (0.25)</td>
<td>98.38 (0.8)</td>
<td>98.28 (0.8)</td>
<td>98.14 (0.6)</td>
</tr>
<tr>
<td>Evening</td>
<td>98.36 (0.30)</td>
<td>98.94 (0.5)</td>
<td>98.66 (0.75)</td>
<td>98.48 (0.5)</td>
</tr>
<tr>
<td>Difference</td>
<td>0.25 (0.08)</td>
<td>0.56 (0.4)</td>
<td>0.38 (0.3)</td>
<td>0.34 (0.13)</td>
</tr>
</tbody>
</table>

Figure in parenthesis shows SD value.

**Source:** Iheme, G. O.

**Psychological Effect of Stress**

The cognitive ability and emotional intelligence of individuals over the last years have led to the conclusion that when a person’s stress level is sufficiently elevated either on the front line of a manufacturing process, in the emergency room, the boredom or battle field, his ability and emotional intelligence to make effective and timely decisions is significantly impaired Thompson (2007). Based on this, the following tests were performed.

**Aptitude Test:** The overall scores revealed that the average score in the morning was 81.48 percent which decreased in the evening with an average score of 74.32 percent and the difference was 7.99. This is as a result of the anxiety in the individual’s life which creates a
kind of noise or mental static in the brain and blocks the ability to retrieve the already stored information and impairs the ability to comprehend and reason Heartmath (2002).

**Letter Cancellation Test**

Letter (alphabets) were given to the individuals and observed both morning and evening. The average score for the LCT in the morning was obtained to be 35.40 and the same was calculated in the evening and the result obtained was 29.72. Thus, the difference was 5.68 Goleman (2004) maintained that stress can lead to learning difficulties such as focusing on a task and poor physical coordination.

Segal (2011) reported that when individuals feel overwhelmed at work, confidence may be lost and the job becomes irritating thus leading to less productiveness and less effectiveness. This can equally lead to chronic stress which leads to physical and emotional health problems. Therefore, the tips of stress management can be used to avoid the physical as well as psychological problems caused by stress.

**Table 2: Effects of stress on psychological parameter**

<table>
<thead>
<tr>
<th>Aptitude test</th>
<th>Letter cancellation Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning</td>
<td>81.48%</td>
</tr>
<tr>
<td>Evening</td>
<td>74.32%</td>
</tr>
<tr>
<td>Difference</td>
<td>7.16%</td>
</tr>
</tbody>
</table>

**Source:** Iheme, G. O.

**Approaches to Stress Management**

Based on the difficult economy of the nation, many of us are finding it harder than ever to cope with stress in the workplace. Regardless of the kind of job, more of our work days are spent feeling frazzled instead of alert and relaxed. Therefore the following strategies could be of help while suffering from stress.

Keeping in mind the circumstances of yourself, select those from the list that are most useful to your own circumstances and work. Focus on what is really important to you and your family (list of priorities). Endeavour to have a regular meeting time to talk about family matters, learn to say No when there is need for that, involve individual in household responsibilities, get house helps if necessary, learn to value yourself and what you do, don’t expect others to tell you, live in the present and not worry about the future or dwell on the past. Try to be flexible and not to border about being perfect, do your best and continue to grow. Inculcate fun and relaxation in your daily plan. Learn to work in a positive ways, eat an adequate meal, exercise regularly and have enough sleep.
Psycho-Physiological Problems among Career Women

Potential Hazards
- DEMAND
- CONTROL
- SUPPORT
- RELATIONSHIP
- ROLE
- CHANGE

Stress Symptoms
- Individual Symptoms
  - Raised blood pressure
  - Sleep & gastrointestinal disturbances
  - Increased nicotine intake
  - Increased irritability
  - Back pains
  - Tension
  - Headaches

- Organizational Symptoms
  - Increased absence
  - Reduced staff

Potential Costs
- Coronary heart disease
- Clinical anxiety and depression
- Burnout
- Reduced profits
- Increased accident
- Increased litigation

Fig. 3: Model of Work Stress

One learns to accept disappointment and let anger go off in a healthy ways, reducing tension by becoming more organized. At work or home adopt methods for keeping track of commitments, due dates and events and to crown it all work with other to establish more family-friendly policies in the community and the work place.

Conclusion
Stress is not necessarily something bad, but depends on individual perception of the situation and their real ability to cope with it. Efforts has been made to bring in little knowledge on stress management strategies for individuals to take advantage over it. With the adoption of the above mentioned strategies, a sense of confidence shall be instilled among the working class women so that they feel more secured and improve their work efficiency.

References
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