



A comparative study of assessment of mental stress level among the working and retired individuals

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Abstract:

Introduction: Stress can be defined as a state of worry or mental tension caused by a difficult situation. Everyone experiences stress to some degree. But degree of stress varies in people with respect to various situation and with level of perception. In this study stress level of working and retired people are assessed and compared.

Aim and Objectives: To investigate and compare the degree of stress in working and retired persons.

Method: One of the traditional methods to detect stress is based on questionnaires called Perceived Stress Scale (PSS). This method completely depends on the answers given by the individuals, people will be tremulous to say whether they are stressed or normal. Total 600 participants are taken randomly. Out of which 300 taken from working population and another 300 from retired persons. In both group there are both male and female participants in equal number. People with comorbid conditions are not included anticipating altered stress level due to disease.

Result: After analysing by T test, it has been seen that the female of working group is more stressed than that of male and most of male participants of retired group are more stressed than that of female participants.

Conclusion: With the result of current study, we can conclude that working for livelihood may be a stressful condition for some people who are having other responsibilities along with their job.

Keywords: Working people, retired ,stress, mental health.

Introduction: Any condition that disrupts or threatens to disrupts homeostasis is called stress [1]. There are two components of stress: stress triggers and stress response. Everybody responds to triggers differently. In stressful situation stress hormones are released by activation of hypothalamic pituitary adrenal axis. Most of the stressful stimuli that increase ACTH secretion also activate the sympathetic nervous system [2] and result in widespread reaction throughout the body called the alarm or stress response [3], also called 'fight or flight response' which may cause increased HR, increased blood pressure, increased rate of respiration, hypertonic muscle and sweating may occur [4]. These are signs of acute stress. Chronic stress cause wear and tear on the body, it suppresses body's immune system, making it harder to recover from illness.

Stress may appear both in working and retired persons. Work and family are the two domains from which most adults derive satisfaction in life but equally they are the common sources of stressful experiences. Work related stress is a growing problem around the world that affects not only the health and wellbeing of employees, but also the productivity of organisations. Some of the many causes of work-related stress include long hours, heavy workload, job insecurity and conflicts with co-workers or bosses. There are six main areas that can lead to work related stress, if they are not managed properly. These are demands, control, support, relationships, role and change. Whether person experiences work related stress depends on the job, the person's psychological make-up, and other factors (such as personal life and general health). Psychological disorders especially depression may increasingly be caused by work-related stressors [5]. 'Psychological' problems include burnout, alcohol abuse, absenteeism, chronic fatigue and accidents, sick building syndrome and repetitive strain injury [6].

While retiring can be a reward for years of hard work, it can also trigger stress, anxiety and depression. Mental disorders are one of the leading causes of ill health and disability, increasing the risk of chronic physical condition and mortality [7]. Retirement has negative consequence on mental health in some persons due to changes in established routines, loss of work-related roles and activities and reduced income levels. The association between retirement and mental health may depend on the context individuals retire from [8].

High job strain is associated with adverse health outcomes [9]. and increased risk of mental health problem [10]. Social characteristics have been shown to be closely linked to several health behaviours and outcomes, including mental health [11].

Materials and Method: Psychological distress was measured with the general health questionnaires, called perceived stress scale (PSS). There is total 10 questionnaires. PSS is available in PDF format. Individual scores on the PSS can be shown in 3 categories. Scores ranging from 0-13 considered low stress, scores ranging from 14-26 considered moderate stress and scores ranging from 27-40 considered as high perceived stress. The psychosocial working conditions, social living environment and accumulation of risk factors at the study was also observed. The PSS is interesting and important because one's perception of what is happening in his life is most important. The Study was conducted in Tezpur Medical College and hospital. There were a total 600 participants of which 300 were in the working group and rest 300 in the retired group. In each group male and female were equal in number (150). Working group

taken between 35-59 years and retired group between 60-75 years. The study was started in January 2022 and completed in January 2023.

Exclusion criteria: Only healthy subjects without any physical or mental illness were included in the current study. Person having any comorbidities are excluded from the study as it may lead to more psychological distress. Also, any participant under psychological therapy or under antipsychotics are also excluded from the study.

Result: It is noticed that male participants of working group experiences significantly less stress as compared to the female counterpart, while retired female have experienced significantly less stress as compared to male counterpart of same group (table 1 and table 2). Also, it has been found that the PSS score level is higher in a significant manner amongst the female participants who are working, than the male counterpart (table 3). In case of retired people, the stress level is found to be higher significantly in the male participants as compared to the female group (table 4).

Male(N= 300)	PSS score				Significant at P <.05
	Mean	Standard deviation	T value	P value	
Working(150)	11.33	3.99	5.402	<0.0001	
Retired(150)	14.67	4.69			

Table 1. Comparing stress between working and retired male participants.

Female(N= 300)	PSS score				Significant at P <.05
	Mean	Standard deviation	T value	P value	
Working(150)	15.42	4.88	4.728	<0.0001	
Retired(150)	12.47	5.88			

Table 2. Comparing stress between working and retired female participant.

Working total (N= 300)	PSS score				Significant at P <.05
	Mean	Standard deviation	T value	P value	
Male(150)	11.33	3.99	7.951	<0.00001	
Female(150)	15.42	4.88			

Table 3. Comparing stress between working male and female participants.

Retired total (N=300)	PSS score				Significant at P <.05
	Mean	Standard deviation	T value	P value	
Male(150)	14.67	6.27	3.124	<0.0020	
Female(150)	12.47	5.88			

Table 4. Comparing stress between retired male and female participants.

Discussion: Perceived stress scale is a classic method of assessment of stress. It has been a popular choice to understand the influence of different situation on the psychology of one individual. This is useful for identifying individual who are experiencing high level of stress and might benefit from stress management interventions. Higher score indicates higher perceived stress. There are no definite cut off point for stress but higher scores correlate with more perceived score.

In our current study it is seen that the working male and female population experience different stress level i.e. in working female population stress level is higher than in working male. This may be due to a combination of social, economic and personal factors like dual responsibilities, time pressure, workplace challenges, workload and expectations, gender roles, cultural norms economic factors and job insecurities etc. Different types of adverse health outcomes due to occupational stress have been identified but psychological disorders are significant because they occur frequently and more commonly in female, they are often remained unrecognised and can be accompanied by social morbidity.

In the current study we can also see that stress level in retired male group is significantly higher than retired female group. The sources of stress in case of retired male subjects may be financial concerns, health issues, loss of identity, social changes etc. However, there are several stress management activities that can be adopted to reduce stress. These may include social support, connectivity with family and friends, development of hobbies and activities, financial planning etc.

Conclusion: The whole study depends on the perception of stress. For same incidence one may be in the low stress category and one may be in the moderate or high stress category. Active employees may rely on organisational resources and time management and retired people can focus on social connections and personal interests as a coping mechanism for stress. Though other more accurate methods like heart rate variability and serum cortisol are available for assessment of stress, we are working with the PSS because of unavailability of certain infrastructure. However, there are scope for further more accurate assessment of stress related work. These may help in understanding causative issue for different groups of people that lead to stress.

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