

STUDY OF STRESSORS AFFECTING INDIAN AIR FORCE PERSONNEL**V. SIVASUBRAMANIAN^{a1} AND K.V.R. RAJANDRAN^b**^aResearch Scholar, Department of Management Studies, Periyar Maniammai University, Tanjore, India^bProfessor, Department of Management Studies, Periyar Maniammai University, Tanjore, India**ABSTRACT**

The Indian Air Force operates in a dynamic environment, which presents several challenges to its personnel. As the Armed Forces are becoming more and more complex in terms of technology and operations, the amount of stress faced by its personnel is also increases manifold. Stress has been taking heavy toll among defense personnel. The incidents of defense personnel including paramilitary personnel committing suicide and cases of soldiers running amok have become a common phenomenon. The maintenance of stress level within the acceptable limit is of utmost importance for not only defense personnel but also equally applicable to civilian industry. The check on stress breeding environment has its positive effect in boosting morale of defense personnel and reduces number of unnatural death due to fratricide, suicide, and PTSD. The gravity of unbalanced behavior of a soldier due to excessive stress would create havoc among colleagues and result in cascading effect on rest of defense establishment. The paper provides association of stress with work culture of Indian Air Force and existence of various stressors in their day today life. Together it makes a study and suggests various unique measures, which promote stress free work environment among Indian Air Force personnel.

KEYWORDS: Stressors, Fratricide, Amok, psychological imbalance, Combat stress, Desertion, Leadership, Organisational climate

The Indian Air force operates in a dynamic environment, which presents several challenges to its personnel. As the Armed forces are becoming more and more complex in terms of technology and operations, the amount of stress faced by the personnel is also increasing. According to the Ministry of Defense, the changing scenarios in India along with the environmental and operational commitments together have put enormous demands for adjustment on the uniformed services.

According to Col KC Dixit who carried out study on stress related issues in Indian Army during Feb 2011, Stress is evidenced to be one of the causative factors for lifestyle disorders such as backaches, sleeplessness, hyperacidity, gas, chronic fatigue syndrome, heart disease, diabetes and even cancer. In addition, hormonal imbalances caused by stress responses can cause fibroid tumors and endometriosis. Stress is also linked to infertility problems among couples. The chronic stress responses can either lead to aggression or depression in people, depending on the personality traits of individual. While the individuals with aggressive attitude suffering from chronic stress are prone to commit fratricide, the individuals with depressive tendencies are prone to commit suicide.

There were as many as 635 cases of suicide including attempted suicides and 67 cases of fratricidal killings in the three services of Armed Forces of India during the years 2003 to 2007. These statistics also indicate that Army was worst affected

by this malady in terms of number of cases of suicides and fratricides in each of the year during this period. The statistics are chilling. According to Ministry of Defense, every third day a soldier is killing himself, at a rate higher than the toll taken by the militants. From 2007 to May 2010, 208 soldiers lost their lives in actions against militants while 368 soldiers killed themselves during this period. Another 15 to 30 soldiers try to kill themselves every year, but fail. The worry is that they might try again. This alarming trend of suicides and fratricidal killings in Indian Armed Forces during the recent past is attributable to enhanced stress environment leading to psychological imbalance in the soldiers. The 31st Parliamentary Standing Committee on Defense have been informed by the Ministry of Defense that seven studies on issues related to stress management have been conducted by the Army since 2005 besides an internal study the Indian Air Force on suicides reported during the period 2002-2007. An in-house study by Indian Navy on 'Occupational Stress in Naval Personnel' has also been conducted. As per these studies, the main causes identified among troops are changing socio-economic environment in the country and domestic problems and there is apparently no systemic failure as suicides attributable to work-related reasons are few. Till a year ago, the suicide rate was more than 100 a year.

Stress

Stress is defined as “the non-specific response of the body to any demand made upon it.”

Researchers maintain that stress occurs when demands on the person which tax or exceed his judgment resources. Stress can be the result of external situations such as an abusive relationship or poor working conditions. Stress can also be the result of internal situations or stressors such as worrying or having pessimistic thoughts about future. The term "stress", as it is currently used was coined by Hans Selye in 1936, who defined it as "the non-specific response of the body to any demand for change".

As illustrated above, increased stress results in increased productivity up to a point, after which things go rapidly downhill.

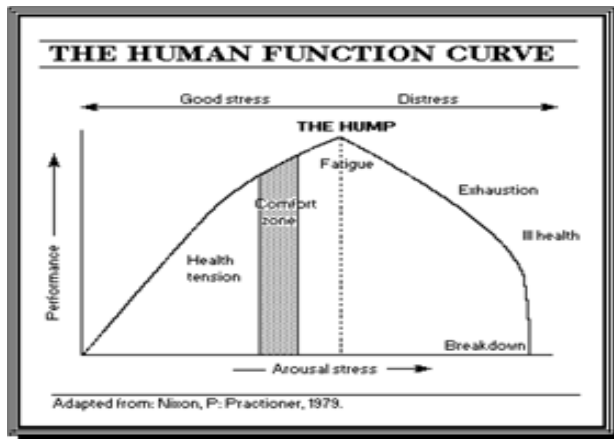


Figure 1: Human Function Curve

However, that point or peak differs for each of us, so we need to be sensitive to the early warning symptoms and signs that suggest a stress overload is starting to push us over the hump. Such signals also differ for each of us and can be so subtle that they are often ignored until it is too late.

Objective

To identify the various stressors which promotes the stress among Indian Air Force Personnel and suggest the various measures to create stress free work environment.

Methodology

The present study is based on both primary and secondary data. Primary data has been collected with the help of questionnaires. Secondary data has been obtained from previous research reports, parliamentary standing committee report on defense (India) and various report of IDSA, DIPR organization.

Review of literature

The current usage of the word stress arose out of Selye's 1930s experiments. His theories of a universal non-specific stress response attracted great interest and contention in academic physiology and he undertook extensive research programs and publication efforts. From the late 1960s, academic psychologists started to adopt Selye's concept; they sought to quantify "life stress" by scoring "significant life events," and a large amount of research was undertaken to examine links between stress and disease of all kinds. By the late 1970s, stress had become the medical area of greatest concern to the general population, and more basic research was called for to address the issue in better way.

The psychiatric diagnosis post-traumatic stress disorder (PTSD) was coined in the mid-1970s, in part through the efforts of anti-Vietnam War activists and the Vietnam Veterans against the war. The condition was added to the Diagnostic and Statistical Manual of Mental Disorders as posttraumatic stress disorder in 1980. PTSD was considered a severe and ongoing emotional reaction to an extreme psychological trauma, and as such often associated with soldiers, police officers, and other emergency personnel. By the 1990s, "stress" had become an integral part of modern scientific understanding in all areas of physiology and human functioning and one of the great metaphors of Western life. Focus grew on stress in certain settings such as workplace stress and stress management techniques were developed.

Common Stressors

The standing committee on defense of India in 2008 which is headed by Mr. B VikhePatil carried out study on the stress level in Indian Armed Forces during 2008-2009 and submitted its report to parliament. According to standing committee report the common stressors which affect all defense personnel are classified as follows:- (a) During Training Period: Tender age at recruitment, loss of emotional support from family and friends, strenuous physical demands of training activities, limited scope for privacy and problems at distant home. (b) In Peace: Marital problems, children's education, property disputes, financial problems, difficulties with civil administration in Resolving disputes. (c) In Field: Separation from family members, adverse climatic conditions, isolation, long Tenures, unknown enemy in counterinsurgency areas,

uncertainty of life, difficult living Conditions and fatigue.”

Stress in Indian Defense Forces

Stress has been taking heavy toll of Indian Army. Incidents of defense personnel including paramilitary personnel committing suicide and cases of soldiers running amok have become a common phenomenon. On the average over 100 soldiers have been committing suicides annually since 2008. On 19 August 2012, in Rajya Sabah, Defense Minister of India Mr. A.K. Antony gave the number of suicides as tabulated below:-

This has been a great cause of concern for the Defence Forces. Not only the human life is lost, it affects the morale of the troops. The suicide rate is increasing in spite of the liberal policy providing various facilities to increase in pay by sixth pay commission, housing projects for army personnel, liberal leave policy etc.

Table 1: Suicide in Indian Army since 2003

Year	No. of Suicides	Remarks
2012 till July 2012	69	On the average 110 Army men lose their life
2011	182	
2010	115	
2009	96	
2008	123	
2007	118	
2006	129	
2005	77	
2004	100	
2003	96	

Reference: The Tribune Chandigarh, India dated 20 Aug 2012

The soldiers are still found under tremendous stress culminating into suicides increasingly. Generally known causes of stress in army are frequent changes of places, colleagues and responsibilities, increasing impact of materialism and operational conditions peculiar to low intensity combat (LIC).

Studies on stress on Indian soldiers

Defense Institute of Psychological Research (DIPR), a laboratory of Defense Research and Development Organization (DRDO), concluded two studies on the psychosocial aspect of optimizing the

operational efficiency of security forces to combat insurgency in 2004 and 2005. It was found that the major outcome of studies were that stress was because of fear of torture, uncertain environments and domestic stresses.

Types of stressors faced by military personnel

Alder, Vaikus, and Martin (1996) McCarroll, Ursano, and Fullerton (1993) identified the main stressors faced by military Personnel are fall under three major categories. They are tabulated as follows.

Table 2: Class of Stressors and Stressor

Class of Stressors	Stressor
Peacekeeping	Being away from home or family Uncertainty of return date Sanitation Lack of privacy Lack of tome off Long working hours Environment Fear of disease Lack of sleep Problem with spouse of children Financial matters at home
Combat	Being ambushed or attacked Receiving hostile fire Killing enemy combatant Handling human remains Knowing someone who was injured Being injured Close quarters Presence of changing enemy Civilians in battlefield Hidden obstacles High casualties toll Intense fire fights
Separation	Being away from home or family

Cases of suicides and fratricidal killings

The MOD provided the following information to standing committee on defense in 2008-09 during its study. This statistics shows number of deaths in the three Services of the Armed Forces due to suicide during the last five years:

Table 3: Statistics of suicides death

Services	2003	2004	2005	2006	2007	2008
Army	96	100	92*	120	115	27
Navy	24	13	23	24	16	06
Air Force	00	04	05	01	02	00
Total	120	117	120	145	133	33

* Includes 15 attempted suicide cases

An analysis of above figures, reveals that during the period 2003 to 2007, there were 635 cases of suicide in the Armed Forces, which also included 15 cases of attempted suicide. On Further query, the Ministry of Defense clarified that “the number of cases of suicides in peace areas has been more than field locations except in the year 2005 where suicide cases in field were marginally higher than peace areas. However, the suicide rate of Indian Army is approximately 7.48 per lakh based on data from 2002 to 31 October 2007. The suicide rate in Army is below the national average, which is approximately 11 per lakh.” The Ministry also stated that none of the suicides in Indian Air Force as well as Indian Navy for the period 2002 to 2007 has been attributed to operational stress.

Fratricide Killing

A person takes this drastic step when he is very much antagonistic towards that individual and has a personal grievance against him, whatever is the reason, at that point of time he resorts to this extreme step. The number of fratricide deaths which took place in our Indian defense forces from year 2003 to 2008 has been brought out by standing committee on defense in its Thirty-First report. The details are tabulated as follows:-

Table 4: Statistics of Fratricide death

Services	2003	2004	2005	2006	2007	2008
Army	08	11	13	24	08	00
Air Force	01	01	01	00	00	00
Navy	00	00	00	00	00	00
Total	09	12	14	24	08	00

The aforesaid table reveals that 67 cases of fratricide were reported during 2003 to 2007. As far as the medical aspect of it is concerned, this happens primarily because of depression. The suicides particularly are on account of depression. The soldier or say a junior commissioned officer gets into a depressing mood and that drives him to this extreme step. There may be two people who may face equally

difficult circumstances. One may respond to it more robustly and may handle that difficulty; the other one may not be able to do so because of their psychological weaknesses and they get into depression. The MOD also reveals that fratricide/suicide rate in India is about half as compared to prevailing trends at US, UK and France.

Cases of Desertion

The soldiers left the field units/barracks without proper authority or leave on their own without informing higher authorities are falls in the category of desertions. It is also found that soldiers are resorting to desertions when their personal requirement could not be met due to service exigencies. The cases of such desertions which took place in Indian Armed Forces during the year 2006 & 2007 as revealed to the standing Committee on Defense by MOD are tabulated below:-

Table 5: Statistics of Desertion

Services	2006	2007
Army	1401	983
Navy	159	367
Air Force	71	39
Total	1631	1389

Establishment of Armed Forces Tribunal

A large number of cases relating to service matter of the members of the Armed Forces have been pending in the Courts for a long time. In a note to the Committee, the Ministry of Defense has informed that the number of cases pending before the Supreme Court and various Courts as on 31.10.2005 was as under:

Table 6: Statistics of cases against Armed Forces

Services	Supreme Court	High Courts
Army	94	7611
Navy	12	463
Air Force	22	1250
Total	125	9324

Stress Management in Armed Forces

Indian Armed Forces consists of Indian Army, Indian Navy and Indian Air Force. The total strength of Armed Forces is Approximately 14 Lakhs which includes Officers and Jawans. As per the Department of Statistics and from the sources of the Internet, the population of India in March 2015 has been estimated at 1278 million. The total number of soldiers, sailors and airmen on active list is reported

to be 1.3 million. These two figures reveal that the number of combatant personnel for every 10,000 Indians is 10.17. This ratio is a lot higher, in other countries. The figures are India 10.17; Pakistan 37.1; SA 47; Russia 59; China 17; Sri Lanka 75; Iran 65 and Israel lead the pack with a figure of 214.

Let us now compare this proportion with the situation as it obtained in India 35 years ago. Indian armed forces were comprehensively re-structured and expanded after the 1962 War, but their strength leveled off at a figure of around 1.25 million by 1981. Our population at that time was 683 million. The resultant per capita ratio works out to 18.3 military personnel for every Indian. Thus, in the last three decades, the number of soldiers for every 10,000 Indians has dropped to 55% of this figure. This results in increase on workload on soldiers, which in turn results in living of soldiers in stress breeding environment.

Stress Management in Indian Air Force

According to the information furnished by the Ministry of Defense in their written note on the subject, the Indian Air Force has a well-established system for addressing personal problems of individuals. The relevant details of the extent system are reproduced below:-

(a) Redressal of Grievances. A well-established system of speedy redressal of grievances exists under Air Force Law for all personnel of the IAF. The system is fair and has stood the test of time.

(b) Organizational Support and Welfare of Personnel and Families. Welfare meetings are held regularly for the personnel to address welfare related measures separately for Airmen, Non Combatant (Enrolled) and Defense Security Core (DSC) at all stations of the IAF. The problems put up by the station personnel are followed up by the Welfare Officer for remedial action and a feedback on the measures taken is given by him during the next meeting. For the families, the Air Force Wives Welfare Association (AFWWA) meeting is held regularly wherein educational activities and welfare activities being provided by the administration are highlighted for the benefits of the Personnel below Officer Rank (PBOR) families by the senior ladies of the station.

(c) Counselling/Interview with Commanders. Counselling sessions are held by supervisors for their subordinates on a regular basis. Similarly, a system

of interview with the CO/Station commander/AOC also in place.

(d) Leave. The stations have been advised to ensure liberal grant of leave to needy personnel, especially for those with compassionate reasons.

Also the Indian Air Force had conducted an internal study on suicides reported during the period 2002-2007 (up to 31st October, 2007). The study found that causative factors in 21% cases were relating to domestic problems, 17% due to financial problems, 23% due to medical problems and 12% due to marital problems, alcoholism etc.” as revealed by MOD to standing committee on Defense (2008-09).

GENERAL CAUSES OF STRESS

The main cause of stress among soldiers which are drawn from result of various previous study/reports is as follows.

- Family discords
- Children education
- Prolong separation from family and deficient in attending to family commitments.
- Failures to take over family responsibilities
- Extra marital affairs
- Conflict in inter personal relationship.
- Familial reasons for stress
- Shortage of married accommodation.
- Peace station mission.
- Denial of leave at required time.
- Stress due to prolonged commitment in LICO environment.
- Poor leadership.
- Low relationship high task oriented leadership.
- Apprehension of sexual dysfunction.
- Lack of medical facilities.
- Shortage of officers/JCOs
- Tenure policies.
- Non availability of quicker Appellate mechanism.
- Unpredictable factors.
- Social apathy.
- Retiring blue.
- Reluctance in seeking Psychiatrists help.
- Absence of mental health professionals and religious teachers in Units

Data collection

The questions are prepared based on above factors. The 'Q' is distributed to group of 60 soldiers. The composition of 60 sample size consists of 40 soldiers and 20 officers. The study was conducted at one of the forward base of Indian Air force establishment and selected group of people are asked to identify the top 10 stressors, from the list which are likely to promote a stress among Indian Air force Personnel. The top 10 Stressors as arrived on completion of analysis are appended below:-

- Separation from family
- Shortage of family accommodation.
- Denial of leave when required.
- Tenure policies.
- Shortage of officers/JCOs
- Poor leadership.
- Stress due to prolonged commitment to LICO
- Reluctance in seeking Psychiatric help.
- Retiring blues.
- Absence mental health profession and religious lectures in unit.

Top 10 stressors for promoting stress among IAF Personnel

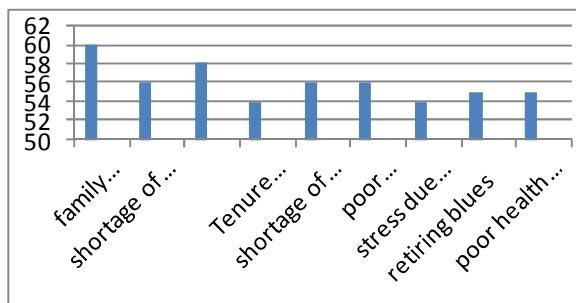


Figure 2: Top 10 stressors for promoting stress

The above chart indicates top 10 stressors, which are identified by study as main reasons for stress breeding environment in workplace of IAF. Out of 10 Stressors, the shortage of family accommodation is the major stress factor which is opined by 100% of respondents while tenure policies, stress due to LICO is projected by 90% of respondents.

Suggestion

The creation of stress free environment in Indian Air force subject to various factors. It involves both workplace environment as well as social environment. In general the implementation of following measures will automatically promote stress

free environment in uniform services and thus reduces avoidable stress among soldiers.

- Liberalized tenure policy.
- Deployment of Psychological counselors in LICO areas.
- Monitoring and analyze of stress related incident.
- Improvement in living and working condition of persons.
- Promotion of Yoga.
- Implementation of Redressal of grievance.
- Improvement of health care system.
- Formation of self help cell.
- Thrust on physical fitness through sports and games.
- Sensitization of commanders.

CONCLUSION

This paper provides sufficient evidence to suggest that stress at work place cannot be ignored and avoided once for all. Almost sizable amount of soldiers in Armed forces in most developing countries like India report high or extreme level of stress. The impact of stress may force them to leave military organization or in some case leave work all together. Such effects are likely to carry a price to individuals, organization and the wider society.

The various remedial measures suggested for alleviation of stressors and creation of stress free workplace needs due consideration by IAF. The implementation of this suggested measures not only promote friendly stress free environment at workplace but also leads to high morale among soldiers in Armed forces.

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