Burnout amongst Paramilitary personnel in India: A Study

Prashant Kumar¹ and Hamendra Dangi²

Abstract

Paramilitary personnel typically suffer a variety of physiological, psychological and behavioural stress effects. The working conditions of paramilitary personnel require intervention from social and human aspects. Certain jobs by their nature are more prone to stress than others. Evidences suggest that paramilitary personnel also lose life due to job related stress/burnout. The manifestation of stress and burnout in the form of suicide, fratricide and killings highlight the urgent need that these must be looked into. In India, the government has taken lots of measures for the welfare of Paramilitary personnel in general but a lot requires to be done for the personnel deployed in disaster prone areas and their well-being vis-a-vis job burnouts. The focus has always been on the job to be done. In the present study an attempt has been made to analyse condition and level of burnout amongst paramilitary personnel using two stage research designs. Results indicate that there is a need to pay immediate attention to increase job satisfaction and productivity of personnel.

Key words: Burnout, Paramilitary personnel, Job satisfaction.

Introduction

A very few occupations require employees to face the kind of adverse situation and challenges that paramilitary personnel do encounter as part of their daily routines. Mass media, both print and television have familiarised viewers with obvious dangers that paramilitary personnel encounter in protecting society and nature while deployed in various disaster prone areas and attending disaster response duties This constant exposure of Paramilitary personnel to physical danger puts them in a state of continual conflict between human instinctual tendency to avoid hazard and their obligation to face up the risk. Their continuous observation of incidents of injury, death and suffering only serves to reinforce this conflict. The working conditions of paramilitary personnel need intervention from social and human aspects. It needs more inputs in the form of training and capacity building perspective so that

^{1.} Inspector General (Provisioning), I.T.B.P., Ministry of Home Affairs, Govt. of India

^{2.} Assistant Professor, Faculty of Management Studies, University of Delhi, Delhi

they are well prepared to meet the challenges of task pressures topped with public condemnation.

Paramilitary personnel typically suffer a variety of physiological, psychological and behavioural stress effects. It has been observed that special attention should be given to occupational stress, as its potential negative consequences affect society in more direct and critical ways than those stressed in many other occupations. Officers and men operating under severe and chronic stress may well be at greater risk of error, accidents and overreaction that can compromise their performance, jeopardize public safety and pose significant liability costs to the organisasion (Colwell, 1988; Violan, 1992; Mathur, 1999 and Marshall, 1986).

In India too, the work environment of Paramilitary personnel resemble this reality. The presence of stress amongst paramilitary personnel Jawans/officers/all ranks is seething from within but not yet has not been addressed properly. The focus is on delivery of services in shortest possible time and rarely on the personnel's state of mental health, fatigue & stress. Stress is considered to be the part of the job. It is taken for granted that a job in police is bound to be stressful. The media reports on police cruelty, indiscipline and mismanagement are but smaller glimpses of the force. The focus has always on the job to be done. Strenuous task such as policing, securing, guarding, eventually becomes too arduous and exacting. While emphasizing on performance, organisations must keep in view the physical and mental health of the personnel also. This study attempts to provide some insight into the burnout levels in the Indian context through a survey of a sample of Paramilitary personnel who have participated in disaster response.

Review of literature

Pines and Maslach (1978) depict burnout as a syndrome of somatic and psychological exhaustion with multiple classifications. Burnout manifests as a subjective feeling of dysphoria, impacting on physical and emotional aspects of one's well-being, and leading to a reduction of behavioural activity and motivation, and the debilitation of one's efforts to perform (Maslach & Jackson, 1981). Further, burnout results from the inability to stabilize internal and/or external needs, and as a result inhibits the allocation of energy resources effectively (Leiter & Maslach, 2005). It may also result from a situation where negligible rewards are bestowed for a goal in which a large investment was made (Rupert & Morgan, 2005; Schaufeli et al, 2004).

Maslach and Pines (1978) identified the symptom of somatic and psychological exhaustion, accompanied by a lack of sleep and headaches, amongst a sample of nurses. Research on burnout began through clinical studies, allowing the construct

to become recognised, at least in the health sector (Anagnostopoulos & Papadatou, 1992; Ahola & Hakanen, 2007; Montgomery et al., 2006 and Vahey et al., 2004).

The amount of research on the phenomenon of burnout renders the need for its measurement and diagnosis as imperative, especially if one considers the adverse effect that it produces. Consequently, burnout has been operationalized internationally based on Maslach's theoretical framework (Maslach & Jackson, 1981; 1986). The framework highlights a single syndrome defined by three components namely Emotional Exhaustion, depersonalization and the feeling of Reduced Personal Accomplishment.

Maslach and Jackson (1981) developed the Maslach Burnout Inventory (MBI), which consists of 22 items that load onto the three factor structure mentioned above: Emotional Exhaustion (EE; nine items), depersonalization (DP; five items), and personal accomplishment (PA; eight items). The results of this inventory consist of three separate scores, one for each factor. A combination of high scores on EE and DP, and a low score on PA, correspond to a high level of burnout. In an effort to categorize and prioritize the dimensions of burnout as outlined by the Maslach Burnout Inventory (MBI), the progressive Phase Model of Burnout was created by Golembiewski, Munzrider, and Stevenson (1986). According to the authors, through the use of this model, precise, convenient, burnout information could be made available to policy makers and organisasions, to assist them in reducing the effects of job burnout.

The Boudreau Burnout Questionnaire (BBQ)

The research model for this study engages the components of Emotional Exhaustion/Energy (EEE), Depersonalization/Personalization (DPP) and lack of/personal accomplishment (LPA) through the Boudreau Burnout Questionnaire (BBQ). This instrument was developed as a practical response to some of the discrepancies and measurement ambiguities currently existing in the field of burnout research and in particular, with the Maslach Burnout Inventory, MBI (Boudreau, 2000). As indicated by Boudreau, there is a need for more questions and more general questions; a need for an adequate measure of continual character of burnout; a need for terms that are easily translated, not colloquial expressions, and a need for positive and negative questions (Boudreau, 2000). Burnout results acquired through the use of the BBQ can be used in Phase Model applications and can be compared with other burnout studies which have employed the MBI in its various forms.

Another such instrument popular is Boudreau burnout questionnaire which can be used in conjunction with the Phase model Approach developed by Golembiewski, Munzrider, and Stevenson (1986). The three components of burnout viz Depersonalization(DPP), Lack of Personal Accomplishment(LPA) & Emotional

Exhaustion (EEE) can be organised by importance and divided into high (HI) and low (LO) categories. Paramilitary personnel have a unique situation in that they may experience the stressors of the helping professions at the same time as they may face the stressors accompanying management and entrepreneurial roles (Gautam, 2000). Their actions and experiences are also deeply bound to the norms and are changing with the demand level and scrutiny of an informed public. The severity of outcomes is also unique to the profession. Although accidents and impairments occur in other helping professions, the responsibility, public accountability, and potential magnitude of their errors, raise the performance yardstick very high for Paramilitary personnel. For paramilitary personnel, inability to effectively manage stress has its most dangerous consequences in the line of duty. Their work often places officers in situations where reaction, speed, co-ordination and the capacity to make rapid decisions and accurate, judgments under pressure is critical and inefficient mental and emotional responses to stress can significantly impair these abilities. In the extreme, stress can cause officers to lose balance and composure to the degree that employ unsuitable or excessive force in dealing with subjects (Moore & Donohue, 1976). At the psychological level, the stress of police work may result in persistent negative emotions such as anger, anxiety or depression which can ultimately lead to psychological burnout or Emotional Exhaustion (Gaines et al., 1983; Vena et al., 1986).

The unusually stringent demands for self control, compounded by the unavailability of effective strategies for inner self-management becomes an added stressor in its own right for police (Abernathy, 1995; Ganster et al., 1996).

On the basis of existing literature, following objectives were formulated.

- To study and identify level of burnout amongst paramilitary personnel who participated in disaster response.
- To find out relation between level of burnout and demographic variables such as age, position in organisasional hierarchy etc.

Methodology

In the present research two stage research designs was used. In the first phase an exploratory study was conducted through review of literature and in-depth interviews with experts. Exploratory study helped in defining research problem and formulating research hypotheses. In the second stage conclusive research in the form of multiple cross sectional descriptive research design was used. Findings of descriptive research design helped for generalization and validation. Survey methods of data collection were used for second stage of research design. In the present research non probability sampling technique in the form of quota sampling was used. A total of 160 respondents

through personal survey were contacted involving 40 respondents each from Indo-Tibetan Border Police (ITBP), Central Industrial Security Force (CISF), Central Reserve Police Force (CRPF) and Border Security Force (BSF) through a structured questionnaire. Data obtained through questionnaire were analyzed using IBM-SPPS 17.0 version.

Findings and Discussion

Profile of respondent is summarized in table below

Table 1: Profile of respondents

Variable	Characteristics	Percentage
	Less than 35 years	51.25
Age Groups	36 to 44 years	32.50
	45-55 years	16.25
	Married	67.50
Marital status	Single	31.87
	Separated	0.63
F:1	Joint	66.25
Family structure	Nuclear	33.75
	Тор	7.50
Position in hierarchy	Middle	32.50
	Field level	60.00
	Less than 5 hours	26.88
Time spent on hobbies	5-9 hours	40.62
(weekly)	10 to 15 hours	22.50
	More than 15 hours	10.00

Majority of the respondents (51.25%) were in the age group of less than 35 years which is being followed by the middle age groups 36-44 years (32.50 %). The respondents of 45-54 years were least 16.25% in number of the sample. 67.50% of the respondents were married while 31.87% were single. One respondent represented the widowed/separated group. 33.75% respondents live as nuclear families while the rest 66.25% belonged to joint families.60% respondents were field workers whereas 32.50% were from middle supervisory level and 7.50% respondents were from top level. Almost 26.88% of the Paramilitary personnel spend merely less than 5 hours on hobbies or areas of special interest in the course of an average week while approximately 40.62% spend up to 5-9 hours per week. Almost 10% spend more than 15 hours per week and 22.50% spend between 10-15 hours.

Descriptive statistics pertaining to the three burnout components viz. depersonalization (DPP), lack of personal accomplishment (LPA) and Emotional Exhaustion (EEE) are presented (- /+) in Table 2. These results reflect the reverse coding of the positive statements in the questionnaire.

Table 2: Descriptive statistics					
	Depersonalisation	Lack of Personal Accomplishment	Emotional Exhaustion		
N	160	160	160		
Mean	23.16	24.18	24.65		
Std. Deviation	6.72	5.75	6.00		
Minimum	10.00	11.00	11.00		
Maximum	42.00	46.00	38.00		

Further phase wise burnout is presented in the Table 3

Table 3: Frequency of respondents categorized in three phases of burnout

Phase	Frequency	Percent	Cumulative Percent
Advanced	86	53.8	53.8
Initial	28	17.5	71.3
Moderate	46	28.8	100.0
Total	160	100.0	

To generalize findings of survey, following hypothesis were formulated and tested.

Hypothesis 1: Burnout amongst Paramilitary personnel depends upon the age group

Chi square test was performed to test the hypothesis, while running the chi square test, the categories 45-54 years and >55 years were merged. Result of test is presented in the table 4 below:

Table 4: Chi square test: Age and Burnout

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.287	4	0.015
Likelihood Ratio	3.182	4	0.528
N of Valid Cases	160		

This indicates that there is a significant relationship between age and burnout.

Recalling that 53.42% of the Paramilitary personnel in the sample, in advanced burnout state are in the age group < 35 years and 32.56% in the age group 36-44 years, the hypothesis that "burnout amongst paramilitary personnel depends upon the age groups was supported. In India, Jawan of paramilitary personnel after a most rigorous training, typically completes his probation at the age of about 20 years. The subsequent years are filled with wear and tear. They are continuously on duty and these punishing hours almost as a badge of honor, going without proper & timely sleep and meals. No wonder, burnout rates are the highest in this age group.

Hypothesis 2: Paramilitary personnel who are single tend to have higher rates of burnout.

Again Chi square test was performed after merging widowed/separated category with "single" category due to inadequate representation in the former.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.874ª	4	0.423
Likelihood Ratio	3.904	4	0.419
N of Valid Cases	160		

Table 5: Chi-Square Tests – Marital Status and Burnout

As indicated in the table 5 the difference was not found to be significant at 0.05 level hence hypothesis that "Paramilitary personnel who are single tend to have higher rates of burnout" was not supported. It was felt that since single Paramilitary personnel may not have avenues for ventilating their pent up feelings, they experience higher rates of burnout. On reviewing the literature, not much information regarding this variable vis-a- vis burnout could be found. However, the study did not support this view.

Hypothesis 3: Paramilitary personnel living in nuclear families tend to have higher rates of burnout.

To test whether there is association between type of family structure and level of burnout chi square test was performed. Results of test are presented in table below.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	0.109^{a}	2	0.947
Likelihood Ratio	0.109	2	0.947
N of Valid Cases	0.160		

Table 6: Chi square test: family structure and burnout.

As indicated in the table 6, value were not statistically significant at 0.05 level and the

hypothesis that "Paramilitary personnel living in nuclear families tend to have higher rates of burnout" is not supported in the present study. Contrary to the hypothesis that paramilitary personnel living in nuclear families tend to have higher burnout rates, no relationship was found between the family structure and burnout levels. The hypothesis was based on the premise that respondents in nuclear families lack the social support that joint families provide.

Hypothesis 4: Burnout depends upon the type of organisasion.

Again Chi square test was performed to determine association between type of organisasion and level of burnout. Results are shown in table below

		T	T
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.802a	6	0.001
Likelihood Ratio	20.897	6	0.002
N of Valid Cases	160		

Table 7: Chi square test: type of organisasion and burnout Chi-Square Test

In this case values were statistically significant at 0.05 level supporting the hypothesis that burnout depends upon the type of Paramilitary organisasion. main hypothesis that burnout depends upon the type of Paramilitary organisasions, an attempt has been made to analyze as to how the three components of burnout [depersonalization (DPP), lack of personal accomplishment (LPA), Emotional Exhaustion (EEE)] using analysis of variance (ANOVA). Results are shown below

Table 8: ANOVA: Burnout components: Organisasion. a)

Sum of df Mean **Squares** Square Depersonalization Between Groups 680.806 2042.419 Within Groups 5138.675 156 32.940 Total 7181.094 159 Lack of Personal Accomplishment Between Groups 1117.350 3 372.450 Within Groups 4137.750 156 26.524 Total 5255.100 159 **Emotional Exhaustion** Between Groups 3 978.650 326.217 Within Groups 30.434 4747.750 156 Total 5726.400 159

b)

	ANOVA		
		F	Sig.
Depersonalisation	Between Groups	20.668	0.000
Lack of Personal Accomplishment	Between Groups	14.042	0.000
Emotional Exhaustion	Between Groups	10.719	0.000

Further to check which component varied significantly between organisasions, Post hoc test was performed.

Hypothesis 5.1: DPP component of burnout differs in various Paramilitary organisasion in which the study was done.

Multiple Comparisons Dependent Variable **(I)** (I) CPMF **CPMF** Mean Difference Std. Error Sig. (I-J) Depersonalization ITBP CISF 9.37500* 1.28336 0.000 CRPF 7.82500* 1.28336 0.000 BSF 4.87500* 1.28336 0.000 CISF ITBP -9.37500* 1.28336 0.000 CRPF -1.55000 1.28336 0.229 BSF -4.50000* 1.28336 0.001 0.000 **CRPF** ITBP -7.82500* 1.28336 CISF 1.55000 1.28336 0.229 BSF -2.95000* 1.28336 0.023 **BSF** ITBP -4.87500* 1.28336 0.000 CISF 4.50000* 1.28336 0.001 CRPF 2.95000* 1.28336 0.023

Table :9 Post Hoc Test for Depersonalization

The p value (0.00) in table 9 indicates that null hypothesis 7.1 is rejected and it can be concluded that there are difference in various type of organisasions on the basis of DPP component. Further to check which organisasion suffers most, a post-hoc test was performed. It was found that ITBP is significantly different than CISF, CRPF and BSF in terms of DPP (p-value =0.00), while CISF differs from BSF. CRPF differs from ITBP & BSF while BSF differs from all three.

Hypothesis 5.2: - Lack of Personal Accomplishment (LPA) component of burnout differs in various Paramilitary organisasions in which the study was done.

(I) Mean Difference **CPMF** Dependent Variable (J) CPMF Std. Error (I-J)Sig. Lack of Personal ITBP **CISF** 6.60000* 1.15161 0.000 Accomplishment CRPF 6.02500* 1.15161 0.000 BSF 5.47500* 1.15161 0.000CISE ITBP -6.60000* 1.15161 0.000 CRPF -0.57500 1.15161 0.618 BSF -1.12500 1.15161 0.330 CRPF **ITBP** -6.02500* 1.15161 0.000 **CISF** 0.57500 1.15161 0.618 BSF -0.55000 1.15161 0.634 BSF -5.47500* ITBP 1.15161 0.000 **CISF** 1.12500 1.15161 0.330 CRPF 0.55000 1.15161 0.634

Table 10: Post Hoc test for Lack of Personal Accomplishment

The p-value (0.00) in table 10 indicates that null hypothesis 7.2 is rejected and it can be concluded that there are difference in various type of organisasions on the basis of LPA component. In the post-hoc test, it was found that ITBP has significantly different than CISF, CRPF and BSF in terms of LPA (p-value =0.00) while CISF differs from ITBP. CRPF and BSF differ from ITBP.

Hypothesis 5.3:- Emotional Exhaustion (EEE) component of burnout differs in various Paramilitary organisasions in which the study was done.

Dependent Variable	(I) CPMF	(J) CPMF	Mean	Std. Error	Sig.
			Difference (I-J)		
Emotional Exhaustion	ITBP	CISF	5.57500*	1.23358	0.000
		CRPF	4.92500*	1.23358	0.000
		BSF	6.30000*	1.23358	0.000
	CISF	ITBP	-5.57500*	1.23358	0.000
		CRPF	-0.65000	1.23358	0.599
		BSF	0.72500	1.23358	0.558
	CRPF	ITBP	-4.92500*	1.23358	0.000
		CISF	0.65000	1.23358	0.599
		BSF	1.37500	1.23358	0.267
	BSF	ITBP	-6.30000*	1.23358	0.000
		CISF	-0.72500	1.23358	0.558
		CRPF	-1.37500	1.23358	0.267

Table 11 Post-Hoc Test for Emotional Exhaustion

The p-value (0.00) in table 11 indicates that null hypothesis D 3 is rejected and it can be concluded that there are difference in various type of organisasions on the basis of EEE component. In the post-hoc test, it was found that ITBP has significantly

different from CISF, CRPF and BSF in terms of EEE (p-value 0.00) while CISF, CRPF and BSF differs from ITBP. (p-value is 0.00 in all cases).

Personnel working in different paramilitary organisasions face mammoth work loads, with never ending challenges of their profession. They come face to face with people in agony on daily basis. Further, there are problems of challenging working conditions, occupational hazards and salaries, generally perceived to be not commensurate with the workloads. No wonder, burnout level depends upon the type of paramilitary organisasion. It has been found that ITBP personnel suffer severe burnout in all three component (i.e. DPP, LPA and EEE) than CISE, CRPF & BSE. It can be concluded on general that ITBP personnel suffer severe burnout in all these components (i.e. EPP, LPA and EEE) than CISE, CRPF and BSE.

Hypothesis 6: Burnout is associated with position of Paramilitary personnel in hierarchy.

Chi square test was used to check whether burnout depends upon position of respondents in hierarchy.

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.874a	4	0.000
Likelihood Ratio	2.041	4	0.728
N of Valid Cases	160		

Table 12: Chi square test: Position in hierarchy.

As indicated in the table value was found to be statistically significant, hence the hypothesis that "burnout is associated with position in hierarchy" was supported in the present study (table 12). The issues and stressors facing Paramilitary personnel differed at different level of organisasion structure and hence, one can expect that resulting burnout level may also be different. It has come to light that the burnout is associated with position of hierarchy. Personnel working at field level have no or very little say in policy level decision making. Hence field workers have highest level of burnout vis-à-vis other levels.

Hypothesis 7: Paramilitary personnel spending less time on hobbies/ areas of special interest tend to experience higher burnout rates.

To check amount of time spent on hobbies influences level of burnout, Chi square test was performed and results are shown in table below

Table 13: Chi-Square Tests – Time spent on hobbies and burnout						
Value df Asymp. Sig. (2-sided						
Pearson Chi-Square	7.860a	6	0.024			
Likelihood Ratio	5.867	6	0.438			
N of Valid Cases	N of Valid Cases 160					

As indicated in Table 13, value was found to be statistically significant, hence hypothesis that "Paramilitary personnel spending less time on hobbies/areas of special interest tend to have high burnout rates" is supported in the present study. The study found relation between time spent on hobbies and burnout and the literature does also point lack of personal time as one of the stessors (Edwards, Kornacki, & Silversin, 2002; Huby et al., 2002; Vickman, 2000).

Conclusion

The results of this study throw light on the phenomenon of burnout levels on paramilitary personnel who have participated in disaster response. The percentage of paramilitary personnel in advanced burnout state is alarmingly high. Younger personnel and those working in ITBP are the most likely candidates to suffer burnout. Living with spouse or in a joint family setting seems to have no bearing on burnout. The severity of outcomes is also unique to the profession. Although accidents and impairments occur in other helping professions, the responsibility, public accountability, and potential magnitude of their errors, raises the performance bar very high for paramilitary personnel.

Paramilitary personnel operating under severe and chronic stress may well be at greater risk or error and over-reaction that can compromise their performance and public safety. The unrealistic expectations imposed by this occupational culture discourage officers from admitting to feeling stress and from openly expressing negative emotions. Thus, while they receive ample training in the theoretical knowledge and technical skills required to perform their jobs and take effective action in an emergency situation, most receive little if any training in the self-management skills to help them quickly regain psychological and physiological equilibrium after the intense challenges of their work. It is clear that practical stress management techniques are needed not only to help personnel remain more balanced during and after the acute stresses of their jobs, but also to take action to better manage and seek real solutions to the chronic stress related to organisasional and family issues. Having put burnout in a nutshell, the next and the most pertinent question is how to treat burnout. The answers are not easy. There are no quick fix remedies. First,

the paramilitary personnel need to recognise and accept that they are suffering and need help rather than living in denial. This ought to be followed by counseling and practising stress management techniques. The paramilitary personnel need to have healthy work and lifestyle habits. This requires attention at multiple levels: the person, the work itself and the organisasion. It also requires changing the way burnout is viewed. It requires changing the medical perception of burnout as a "stigma of vulnerability". As Gagnon (2001) states: "The culture has to change from one of being tough to yourself to, where it's okay to take care of yourself."

It is hoped that this study will, in some way, draw attention to the issues of burnout faced by paramilitary personnel, and promote positive changes in their system to reduce burnout levels. Changes in the system, however, will require active commitment on the part of individuals, organisasions, and governments' alike. This study was primarily concerned with disaster operation and did not look at routine/day-to-day working conditions of Paramilitary personnel. Further only major Paramilitary personnel were taken for study. Moreover similar studies on defence forces, civil police and other actors, who participate in disaster response operation, can give a magnified view. Burnout also depends upon the time frame. During the study period, no major disaster has taken place. Results need to be carefully interpreted in the immediate after-math of disaster. These limitations, although restricting for the study, do provide suggestions and opportunities for future research in the field of burnout.

References

- Abernathy, A. (1995). The development of an anger management training programme for law enforcement personnel. In A. Abernathy, Ed. *Job stress interventions*. Washington, D.C.: American Psychological Association, 21-30.
- Ahola, K., & Hakanen, J. (2007). Job strain, burnout, and depressive symptoms: A prospective study among dentists. *Journal of Affective Disorders*, 104, 103-110.
- Anagnostopoulos, F., & Papadatou, D. (1992). Factional structure and internal consistency of the MBI in nurses. *Psychological Issues*, 5 (3), 183-202.
- Boudreau, R. A. (2000, July). Measuring burnout: Ironies and evidence. Paper presented at the Seventh Annual International Conference on Advances in Management, Colorado. Spring, CO.
- Burke, R.J. Shearer, J., & Deszca, G.(1984). Burnout among men and women in Police work: An examination of the Cherniss Model. *Journal of Health and Human Resources Administration*, 7, 162-188.
- Colwell, Lee, (1988). Stress a major energey of law enforcement professionals (Reprinted from Feb. 21, 1987), edition of Arkansas Democrat) in *FBI Law Enforcement Bulletin*. 57 US Dept. Of Justice, FBI Washington D.C.
- Edward, N., Kornacki, M.J., & Silversin, J. (2002). Unhappy doctors: what are the causes and what can be done? *BMJ*, 324,835-8.

- Gagnon, L. (2001, November 20). Battling burnout. The Medical Post, 37(39). http://www.medicalpost. com/mpcontent/article.jsp?content=/content/EXTRACT/RAWART/3739/23A.html.
- Gaines, J., & Jermier, J. (1983). Emotional Exhaustion in a high stress organisasion. Academy of Management Journal, 26, 567-586.
- Ganster, D., Pagon, M., & Duffy, M.(1996). Organisational and international sources of stress in the Slovenien Police Forces. Policing in Central and Eastern Europe Ljibljana Slovenia: College of Police and Security Studies.
- Gautam, M. (2000). Physicians and suicide. In L. S. Goldman, M. Myers, & L. J. Dickstein (Eds.), The handbook of physician health: The essential guide to understanding the health careneeds of physicians
- Golembiewski, R. T., Munzenrider, R. F., & Stevenson, J. G. (1986). Stress in organisasions: Towards a Phase Model of burnout. New York, NY: Praeger.
- Huby, G., Gerry, M., Mckinstry, B., Porter. M. Shaw, J., & Warte, R. (2002). Morale among general practitioner; qualitative study exploring relations between partnership arrangements, personal style, and work load. British Medical Journal; 325,140-144.
- Leiter, M. P., & Maslach, C. (2005). A mediation model of job burnout. In A. S. G. Antoniou & C.L. Cooper (Eds.), Research companion to organisasional health psychology (pp. 544-564). Cheltenham, United Kingdom: Edward Elgar.
- Marshall, J. (1986). Towards ecological understanding of occupational stress. Special issue Occupational and Life Stress & the Family. International Review of Applied Psychology, 35, 271-286.
- Maslach, C., & Jackson. S. (1981). MBI: Maslach Burnout Inventory. Palo Alto, CA; Consulting Psychologists
- Maslach, C., & Jackson, S. (1986). MBI: Maslach Burnout Inventory (2nd ed.) Palo Alto, CA: Consulting Psychologists Press.
- Mathur, P. (1999). Stress in Police in India: Recognition, diagnosis and coping strategies. New Delhi: Gyan Publishing House.
- Montgomery, A. J., Panagopolou, E., & Benos, A. (2006). Work-family interference as a mediator between job demands and job burnout among doctors. Stress and Health, 22, 203-212.
- Moore, L., & Donohue, J. (1976). The patrol officer: Special problems/special cures. Police Chief, 45, 42.
- Pines, A., & Maslach, C.(1978). Characteristics of Staff burnout in mental health settings. Hospital and Community Psychiatry, 29, 233-237.
- Rupert, P. A., & Morgan, D. J. (2005). Work setting and burnout among professional psychologists. Professional Psychology: Research and Practice, 36, 544-550.
- Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. Journal of Organisasional Behavior, 25, 293-315.
- Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P., & Vargas, D. (2004). Nurse burnout and patient satisfaction. Medical Care, 42, 57-66.
- Vena J.E., Violanti, J.M., Marshall, J., & Fiedler, R.C. (1986). Mortality of a municipal worker cohort: III. Police officers. American Journal Ind. Med., 10, 383-397.
- Vickman, L. (2000). Towards an understanding of burnout. Medical Group Management Journal, 47(1),18-21.
- Violanti, J.M. (1992). Coping strategies among police recruits in a high-stress training environment Journal of Social Psychology, 132, 717-729.