

# Relationship between Occupational Stress, Optimism and Resilience in Paramilitary Force Personnel: A Pilot Study



**S. K. Rawat**  
Research Scholar,  
Deptt. of Psychology,  
University of Lucknow,  
Lucknow, India



**P. C. Mishra**  
Dean, Faculty of Arts,  
Professor & Ex-Head,  
Deptt. of Psychology,  
University of Lucknow,  
Lucknow, India

## Abstract

The present pilot study was conducted to explore the relationship between Occupational Stress, Optimism and Resilience in 200 personnel of paramilitary force; age range of respondents was 40-55 years with the mean of 47. They were all between the income-range of 20,000-65,000. All the participants were administered on Occupational Stress Index developed and standardized by Srivastava and Singh (1981), Life Orientation Test Revised (LOT-R) developed by Scheier Carver and Bridges (1994) and The Resilience Scale (RS) developed by Wagnild and Young (1993). Correlational analysis was applied to find out the relationship between Occupational Stress, Optimism and Resilience in personnel of paramilitary force. Results reveal that there is significant positive correlation between optimism and resilience (overall and area-wise) whereas occupational stress is negatively correlated with optimism and resilience (overall and area-wise).

**Keywords:** Occupational Stress, Optimism, Resilience.

## Introduction

Personnel of Paramilitary forces play a crucial role in ensuring the security and peace of our country. In addition to securing the nation, paramilitary forces (PMF) fulfil other important duties such as: internal security, election duties and disaster management. PMF personnel are at risk exposed to acute stress because violent and threatening encounters are part of their professional situation. In addition because they do not have a fixed pattern of work and are obliged to deal with anticipated and unforeseen emergency situations for indefinite periods of time, the culminating pressure chronically increases daily stress. They are posted on non-family sites where the influence of the family is absent. In these stressful living or working situations, the PMF personnel are likely to experience multitude of mental health problems, such as negative emotions (e.g., fear and anger), physiological over reactivity (e.g., palpitations and increased blood pressure), and dysfunctional cognitions (e.g., pessimistic thoughts about oneself). These stress reactions can degrade concentration and task performance further leading to changes in job performance, commitment and quality of life.

## Occupational Stress in Paramilitary Force Personnel

Stress can be defined as a person's adverse reaction to excessive pressure or other types of demand. At present, more than half a million people report experiencing work-related stress at a level which makes them sick. Therefore, the personnel of the paramilitary forces working under adverse physical conditions, the protection of citizens and the sovereign rights of the country, are no exception to the rule. They are very prone to occupational stress or job stress in their own area and therefore require immediate attention.

Suicides and fratricidal killings in paramilitary forces in almost all regions where they are deployed attracted the attention of the higher authorities and the common people. What are the factors that pushing committed paramilitaries to the brunt of fratricide and suicidal debatable subject? Is the workload or anything else that enforces them to turn the guns on their colleagues or themselves in distress or anger? The majority of the people, including the ex-serviceman say tension prevails in uniform, which is increasingly common in conflict areas where they are active in the fight against insurgencies, to suppress riots or to maintain civil status,

guarding the restive border. Unable to bear the tension, many members of the main paramilitary forces, the CRPF, the BSF, the CISF and even local police have committed suicide or shot their superiors / compatriots with their service weapon at the scene of work or during their official accommodation.

#### **Optimism in Paramilitary Force Personnel**

Optimism can be described as a generalized expectancy that individuals experience good outcomes in life (Gillham, 2000). Optimism could be the most powerful predictor of behavior in leading people to persist in goal pursuits. Optimism contains an expectation of a favorable outcome even when unfavorable results could occur. People who might be optimistic engage in more focused coping in stressful situations (Chemers, Watson, & May, 2000; Gillham, 2000). Optimism can help people to adapt and accept the reality of a challenge quickly such as a soldier of paramilitary being sent overseas. Optimistic individuals appear to display less signs of disengagement than someone pessimistic. This could be important for personnel of paramilitary force especially when they need to perform tasks efficiently under a great deal of stress.

An optimistic soldier of the paramilitary forces may feel that his performance deserves to remain in the paramilitary force despite the negative aspects of his career choice. Pessimism, on the other hand, can be associated with decades of poor performance, low achievement and serious psychological distress. Pessimists might be less likely to make efforts to ensure their well-being and will many times engage in self-defeating patterns (Carver & Scheier, 2002). Some pessimists may engage in habits such as substance abuse, sleeping disorders, evading personal situations, or possibly suicide, when dealing with life stress. Optimists cope better when times are tough (Carver & Scheier, 2002).

Researchers have argued that optimism resource serves as a pool of motivational energy to withstand work pressure in a competitive environment (e.g. Carver & Scheier, 2014; Luthans, Avolio, Avey, & Norman, 2007). Jobin, Wrosch, and Scheier (2014) found that those individuals who have high optimism scores reported less stress.

#### **Resilience in Paramilitary Force Personnel**

Resilience is an important construct for those who work in high-stress, potentially traumatic occupations. Resilience refers to an individual's ability to resist stressors and no overt psychological dysfunction, such as a persistent mental illness or negative mood. This is the common psychological view of resilience, that is, resilience is defined in terms of a person's ability to avoid psychopathology despite difficult circumstances. Psychological stressors or "risk factors" are often considered to be serious acute or chronic stress situations, such as someone else's death, chronic illness, sexual, physical or psychological abuse, fear, unemployment and violence. According to Zautra, Hall and Murray (2010), resilience is best described as a successful adaptation to unfavourable conditions. Personal characteristics determine resilience processes if these

characteristics lead to healthy outcomes after stressful situations (Zautra, Hall and Murray, 2010).

Resilience is the construct of interest in this study. Resilience factor (personal competence and acceptance of self and life) moderate the negative effects of stress and promote adaptation (Wagnild & Young, 1993). The transactional theory of stress and coping (Lazarus & Folkman, 1984) provided the framework for this study as it acknowledges the dynamic relationship between the person and the environment. For this theory, stress is defined as a relationship between the person and the environment which is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (Lazarus & Folkman, 1984). To this end, the dynamic relationship between paramilitary force personnel' resilience and their experience of occupational stress is investigated.

#### **Method**

##### **Purpose**

To study the relationship between occupational Stress, optimism and resilience among personnel of paramilitary force.

##### **Objective of the Study**

To assess the relationship between occupational stress (overall and area wise), optimism and resilience (overall and area wise) in personnel of paramilitary force.

##### **Hypothesis**

1. The relationship between Occupational Stress (overall and area wise) and Optimism is negative.
2. The relationship between Occupational Stress (overall and area wise) and Resilience (overall and area wise) is negative.
3. The relationship between Resilience (overall and area wise) and Optimism (overall) is positive.

##### **Participants**

The present study was conducted on 200 personnel of paramilitary force; age range of respondents was 40-55 years with the mean of 47. They were all between the income-range of 20,000-65,000.

##### **Procedure**

All the respondents who consented to participate in this study were briefed about the purpose of the study. Thereafter they were asked to fill the questionnaires related to occupational stress, optimism and resilience.

##### **Nature of the Study**

This is a correlational study in nature. Thus a correlational research design is applied for data analysis. The central characteristics of the design is to estimate the intensity of optimism and resilience of paramilitary force personnel in reference to degree of occupational stress in high demanding work settings of paramilitary force personnel. Search was made on various facets of occupational stress, optimism and resilience.

##### **Variables**

In the present study following variables were taken into account.

##### **Occupational Stress**

1. Role Overload,
2. Role Ambiguity,

3. Role Conflict,
4. Unreasonable Group And Political Pressures,
5. Responsibility For Persons,
6. Under Participation
7. Powerlessness
8. Poor- Peer Relations At Work,
9. IntrinsicImprovement,
10. Low Status,
11. Strenuous Working Condition And
12. Unprofitability.

**Optimism****Resilience**

Factor 1: Personal Competence

Factor 2: Acceptance of self and life

**Measures****Occupational Stress Index (OSI)**

The level of occupational stress was assessed with the help of Occupational Stress Index developed and standardized by Srivastava and Singh (1981). The index assesses employees' perceived stress arising from the 12 dimensions of job life. The dimensions are role overload, role ambiguity, role conflict, unreasonable group and political pressures, responsibility for persons, under participation powerlessness poor- peer relations at work, intrinsicimprovement, low status, strenuous working condition and unprofitability. The Occupational Stress Index consists of forty-six statements with five alternative responses, namely strongly agree, agree, uncertain, disagree, strongly disagree. The reliability and validity of this scale are high.

**Life Orientation Test Revised (LOT-R)**

This scale was developed by Scheier Carver and Bridges (1994). This LOT-R consists of 10 items. Of these 10 items, item no. 2, 5, 6, and 8 are filler items only. They are not scored as a part of the revised scale. Items number 1, 3, 4, 7, 9 and 10 are sum items to obtain an overall score. Among the sub-items, item no. 3, 7 and 9 are reverse code items. Among six items three are scored in positive direction and three are scored in negative direction. Respondents are asked to indicate the extent to which they are agreeing with each of the items using the following response format: 0-Strongly Disagree; 1 = Disagree; 2 = Neutral; 3 = Agree; 4 = Strongly Agree. The reliability and validity of this scale are high.

**Resilience Scale (RS)**

The 25-item, Likert format, Wagnild and Young (1993) resilience scale is used for data collection. The resilience scale (RS), which measures the capacity to withstand life stressors, and to thrive and make meaning from challenges consists of a 17-item "Personal Competence" subscale and an 8-item "Acceptance of Self and Life" subscale. It is self-reported summated rating scale, with responses ranging from strongly disagree (1) to strongly agree (7). Wagnild and Young (1993) reported reliability co-efficient of .91 for the scale, while in another study an Alpha reliability co-efficient of .861 was established, both indicating that the resilience scale is reliable. Resilience scale is a valid and reliable tool for measuring resilience among adults (Ahern et al. 2006; Ryan and Caltabiano 2009) basically because of its reported good psychometric properties, both from the

original authors as well as others (Humphreys 2003; Christopher 2000; Heilemann et al. 2003, and Aroian and Norris 2000).

**Results**

The table-1 indicates that the relationship between occupational stress (overall) and optimism is found to be negative. And the obtained coefficient of correlation is found to be not significant ( $r = -.300$ ). It means that the higher level of the optimism the lower will be the occupational stress. Table also shows the area wise correlation between occupational stress and optimism. There exists a negative correlation between role overload and optimism ( $r = -.350$ ,  $p < 0.01$ ), role ambiguity and optimism ( $r = -.360$ ,  $p < 0.01$ ), role conflict and optimism ( $r = -.150$ ), unreasonable group and political pressure and optimism ( $r = -.120$ ), responsibility for the person and optimism ( $r = -.150$ ,  $p < 0.01$ ), under participation and optimism ( $r = -.140$ ,  $p < 0.05$ ), powerlessness and optimism ( $r = -.060$ ,  $p < 0.01$ ), poor peer relations at work and optimism ( $r = -.120$ ), intrinsic impoverishment and optimism ( $r = -.200$ ), low status and optimism ( $r = -.190$ ,  $p < 0.05$ ), strenuous working condition and optimism ( $r = -.180$ ,  $p < 0.01$ ), unprofitability and optimism ( $r = -.230$ ,  $p < 0.01$ ). Thus the H1 is supported.

The table-1 indicates that the relationship between occupational stress (overall) and resilience (overall) is found to be negative ( $r = -.180$ ,  $p < 0.05$ ). And the obtained coefficient of correlation is found to be significant. It means that the higher level of the resilience the lower will be the occupational stress. There exists a negative correlation between role overload and personal competence ( $r = -.450$ ,  $p < 0.01$ ), role ambiguity and personal competence ( $r = -.230$ ), role conflict and personal competence ( $r = -.180$ ,  $p < 0.05$ ), unreasonable group and political pressure and personal competence ( $r = -.090$ ,  $p < 0.01$ ), responsibility for the person and personal competence ( $r = -.020$ ,  $p < 0.01$ ), under participation and personal competence ( $r = -.120$ ,  $p < 0.01$ ), powerlessness and personal competence ( $r = -.370$ ,  $p < 0.01$ ), poor peer relations at work and personal competence ( $r = -.130$ ), intrinsic impoverishment and personal competence ( $r = -.050$ ), low status and personal competence ( $r = -.030$ ,  $p < 0.01$ ), strenuous working condition and personal competence ( $r = -.140$ ,  $p < 0.05$ ), unprofitability and personal competence ( $r = -.230$ ), overall occupational stress and personal competence ( $r = -.240$ ).

There exists a negative correlation between role overload and acceptance of self and life ( $r = -.180$ ), role ambiguity and acceptance of self and life ( $r = -.040$ ,  $p < 0.01$ ), role conflict and acceptance of self and life ( $r = -.090$ ,  $p < 0.01$ ), unreasonable group and political pressure and acceptance of self and life ( $r = -.320$ ,  $p < 0.01$ ), responsibility for the person and acceptance of self and life ( $r = -.200$ ), under participation and acceptance of self and life ( $r = -.300$ ,  $p < 0.01$ ), powerlessness and acceptance of self and life ( $r = -.300$ ,  $p < 0.01$ ), poor peer relations at work and acceptance of self and life ( $r = -.090$ ,  $p < 0.05$ ), intrinsic impoverishment and acceptance of self and life ( $r = -.050$ ,  $p < 0.01$ ), low status and acceptance of self and life

( $r = -.150$ ), strenuous working condition and acceptance of self and life ( $r = -.090$ ,  $p < 0.01$ ), unprofitability and acceptance of self and life ( $r = -.101$ ), overall occupational stress and acceptance of self and life ( $r = -.000$ ,  $p < 0.01$ ).

There exists a negative correlation between role overload and resilience ( $r = -.430$ ,  $p < 0.01$ ), role ambiguity and resilience ( $r = -.190$ ,  $p < 0.01$ ), role conflict and resilience ( $r = -.090$ ,  $p < 0.01$ ), unreasonable group and political pressure and resilience ( $r = -.210$ ,  $p < 0.05$ ), responsibility for the person and resilience ( $r = -.070$ ), under participation and resilience ( $r = -.220$ ,  $p < 0.01$ ), powerlessness and resilience ( $r = -.410$ ,  $p < 0.01$ ), poor peer relations at work and resilience ( $r = -.060$ ,  $p < 0.05$ ), intrinsic impoverishment and resilience ( $r = -.060$ ,  $p < 0.01$ ), low status and resilience ( $r = -.040$ ,  $p < 0.01$ ), strenuous working condition and resilience ( $r = -.150$ ,  $p < 0.01$ ), unprofitability and resilience ( $r = -.180$ ,  $p < 0.01$ ), overall occupational stress and resilience ( $r = -.180$ ,  $p < 0.05$ ). Thus the H2 is supported.

It is obvious from table-1 that the relationship between optimism and resilience (overall) is found to be significantly positive ( $r = -.310$ ,  $p < 0.01$ ). Table shows the area wise correlation between resilience and optimism. There exists a positive correlation between personal competence and optimism ( $r = -.310$ ,  $p < 0.05$ ), acceptance of self and life and optimism ( $r = -.150$ ,  $p < 0.01$ ). This ascertains that when employees have enough optimism there is an increase in resilience leading to better performance and quality of life. Therefore the H3 is supported.

### **Discussion**

It is to be pointed out that occupational stress has become a serious health issue, not just in terms of an individual's mental and physical well-being, but also for employers and governments who have begun to assess the financial consequences of work stress. Lou and Shiau (1997) estimate that occupational stress causes half of all absenteeism, 40% of turnover, and that 5% of the total workforce accounts for the reduced productivity due to preventable stress (300 billion dollars for the US economy annually).

Interacting with work stressors are the individual's characteristics. These are brought to the workplace rather than being a function of it, but they are important ingredients in occupational stress nonetheless. These characteristics include the worker's level of anxiety, tolerance of ambiguity; Type A behaviour pattern, and others (Greenberg, 1990). Perhaps the most predictable consequence of job stress is the report of overall job dissatisfaction. The

employee feels little motivation to go to work, to do a good job while at work, or to stay on the job (Rice, 1992).

Optimism has demonstrated some effects on stress reduction and facilitated psychological functioning as well. People who hold generalized positive expectancies (dispositional optimists) have reported less mood disturbance in dealing with a variety of stressors, including adaptation to college (Aspinwall & Taylor, 1992; Scheier & Carver, 1992), breast cancer biopsy (Stanton & Snider, 1993) and breast cancer surgery (Carver et al., 1993). Positive thinking may serve as a safeguard against the health-threatening effects of stress (Peterson, 2000). The potential to cope actively and proactively with respect to health may help to lessen adverse physiological effects of stress.

The basic principles of Positive Psychology have been adapted to the training programs used by the U.S. Marine Corps and the U.S. Army. For example, post-deployment infantrymen who had completed one such program, "Positive Emotions Resilience Training," were shown to have more quickly increased baseline functionality and recovery from stress than those in the control group, who had not been exposed to the training (Johnson et al., 2014). The conceptual building blocks of positive psychology and learned optimism, along with the recognition that a holistic response to stressors (physical, social, and psychological) best contributes to wellness and health, are at the heart of resiliency theory. The social ecology of resilience theory integrates the previously described individual-level explanations found in stress theory and positive psychology, but adds variables from the fields of social learning and cultural adaptation. It aims to identify pathways for healthy growth and adaptability of individuals, organizations, and communities, in spite of external threats, by accounting for the protective factors resulting from embeddedness in a broader social ecological system. The components of resiliency research include prevention, intervention, education, and training.

A robust and influential ecological model of resilience in law enforcement and other high-risk occupations is the "Stress Shield Model of Resilience" developed by Paton et al. (2008). The model seeks to explain how individuals adapt, rebound, and return to normalcy following exposure to risky environments or traumatic events. According to this research, resilience is an outcome of the individual's adaptive capacity and their ability to make sense or give meaning to these events.

**Table 1**  
**Inter-correlation matrix (Occupational Stress, Optimism and Resilience Variables N=200)**

	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13	X14	X15	X16	X17
X1	1	56**	26**	25**	-02	-45**	-38**	-04**	41**	00	64**	58**	68**	-35**	-45**	-18	-43**
X2		1	33**	02	-11	-32**	-19**	-07**	36**	24**	53**	60**	66**	-36**	-23	-04**	-19**
X3			1	11	14*	-15**	-04**	09	11	18*	26**	19**	53**	-15	-18*	-09**	-09**
X4				1	45**	-16**	-14	-09	14	-13**	26**	09**	39	-12	-09**	-32**	-21*
X5					1	-09	-21**	09*	-09**	-24**	17*	-03	23*	-15**	-02**	-20	-07
X6						1	44**	35*	-22*	36	-42**	-48**	-09*	-14*	-12**	-30**	-22**
X7							1	10	10	13**	-36**	-33**	-02	-06**	-37**	-30**	-41**
X8								1	-22	29*	10**	-10**	29**	-12	-13	-09*	-06*
X9									1	-03	24**	36**	49	-20	-05	-05**	-06**
X10										1	10*	-14**	32*	-19*	-03**	-15	-04**
X11											1	51**	67**	-18**	-14*	-09**	-15**
X12												1	51**	-23**	-23	-01	-18**
X13													1	-30	-24	-00**	-18*
X14														1	31*	15**	31**
X15															1	33**	91
X16																1	69**
X17																	1

*Decimals removed from the coefficients.*

*p-value: .05 ≤ 0.10, .01 ≤ 0.12, .001 ≤ 0.17*

X1-Role overload,X2-Role ambiguity, X3 Role conflict,X4-Unreasonable group and political pressure,X5-Responsibility for the person,X6-Underparticipation,X7-Powerlessness,X8-Poor peer relations at work,X9-Intrinsic impoverishment X10-Low status,X11-Strenuous working condition,X12-Unprofitability, X13-Overall Occupational stress,X14-Overall Optimism, X15- Personal Competence, X16- Acceptance of Self and Life, X17- Overall Resilience.

\*. Correlation is significant at the 0.05 level. \*\*. Correlation is significant at the 0.01 level.

**Conclusion**

In the present study the correlational analysis suggests that there is negative relationship between occupational stress and optimism. Occupational stress also has a negative correlation with resilience. Analysis also suggests that optimism has significant positive correlation with resilience. Optimism and resilience reduce the stress and make the journey of hard working life easy and acceptable for the personnel of paramilitary force. Optimism gives the personnel a positive outlook towards stressful life. On the other hand resilience gives the personnel the power to believe in their own strengths and to see the positive side of each and every situation, therefore prompting them to bounce back in their normal functioning after every difficult situation. The present study was conducted only on paramilitary force. Further studies can be conducted on different forces or department. Indian paramilitary force personnel are always subject to call, "overworked, overburdened and overused, it's a hard day's life for paramilitary force personnel who is just not seen as the friendly neighbourhood cop by the common man." Thus Occupational Stress associated with personnel of paramilitary force can be managed by following optimistic training and give interventions that enhance resilience, by following these personnel can provide a quality service to the country and maintain commitment to their work.

**References**

- Aspinwall, I.G., & Taylor, S.E. (1992). *Modeling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. Journal of Personality and Social Psychology, 63*, 989-1003.
- Carver, C. S., & Scheier M. F. (2002). *Optimism*. In C. R. Snyder, & S. J. Lopez (Eds.). *Handbook of positive psychology* (pp. 231-243). New York, NY: Oxford University Press.
- Carver, C. S., & Scheier, M. F. (2014). *Dispositional Optimism. Trends in Cognitive Sciences, 18* (6), 293-299. doi: 10.1016/j.tics.2014.02.003
- Chemers, M. M., Watson, C. B., & May, S. T. (2000). *Dispositional affect and leadership effectiveness: A comparison of self-esteem, optimism, and efficacy. Personality & Social Psychology Bulletin, 26*, 267-277.
- Gillham, J. (2000). *The science of optimism and hope*. Radnor, PA: Templeton Foundation Press.
- Greenberg, J. (1990). *Organizational justice: Yesterday, today, and tomorrow. Journal of Management, 16*, 399-432.
- Jobin, J., Wrosch, C., and Scheier, M. F. (2014). *Associations between dispositional optimism and diurnal cortisol in a community sample: When stress is perceived as higher than normal. Health Psychology, 33* (4), 382-391. doi:10.1037/a0032736
- Johnson, L. B., Todd, M., & Subramanian, G. (2005). *Violence in police families: Workfamily spillover. Journal of Family Violence, 20*(1), 3-12.
- Johnson, R.B., & Onwuegbuzie, A. J. (2004). *Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33*(7), 14-26.
- Lou, L. & Shian, C (1997). *Occupational stress in clinical nurses' .Counselling Psychology Quarterly, 10*(1), 39-51.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). *Positive psychological capital: Measurement and relationship with performance and satisfaction. Personnel Psychology, 60* (03), 541-572. doi:10.1111/j.1744-6570.2007.00083.x
- Paton, D., Violanti, J. M., Burke, K. J., Clarke, J., & Keenan, D. (2008). *Stress shield: A model of police resiliency. International Journal of Emergency Mental Health, 10*(2), 95-107.
- Peterson, C. (2000). *The future of optimism. American Psychologist, 55*(1), 44-55.
- Rice, P. L. (1992). *Stress & Health* (2nd Ed.) Pacific Grove, California: Brooks/Cole Publishing Company.
- Singh Lather A., Aggarwal V., Samantray L. M., University School of Management Studies, GGS Indraprastha University, Delhi. *Symbiosis Centre for Management and HRD Vol 3, No. 2*
- Scheier, M.F., & Carver, C.S. (1992). *Effects of optimism on psychological and physical well-being; Theoretical overview and empirical update. Cognitive Therapy and Research, 16*(2), 201-228.
- Stanton, A.L., & Snider, P.R. (1993). *Coping with a breast cancer diagnosis: A prospective study. Health psychology, 12*.16-23.