
Research Papers



**“ A study of Job-stress, Job-involvement, Anxiety level and mental Health Among Maharashtra Police Constables ”.
(A special reference to Aurangabad and Jalna District.)**

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Abstract

A minor research project sanctioned by UGC and completed by Dr. B.N. Barve is given briefly as follows. In this project job-stress, job-involvement and mental-health of police-constables was measured. For this purpose 100 Male and 100 Female constables were selected for the study. A psychological devices like occupational stress index, mental health inventory were used for finding the respective levels. The conclusions drawn from this study are given in the project.

The Maharashtra Police Department plays a very important role for establishing the law and order in the society. Especially the Bombay Police force have achieved so many awards for controlling the underworld crime rates. But the man/women who works in this Department have to loose so many family responsibilities due to this heavy work load and 24 hours duties. The salaries of the Department are not high as compared to othe Departments. They have no right to go on strike or make some demands to the Govt. It increases the stress, anxiety and low involvement in the job. If the stress and Anxiety increases it affects the behavioural pattern of the police force.

In the year 2002-03 some incidents takes place just like attacks on the police officers by the police constables fire to Sr. Officers, suicide due to not sanctioning leave. These are the rare incidents but it reveals that there are some hidden reasons or psychological reasons behind such incidents. It should be find out scientifically. So that some

major preventive steps can be taken.

In this study, it is planned to study the role stress, anxiety level, Job Involvement and Mental Health of the Maharashtra Policemen and policewomen. While studying these problems following factors are taken into consideration.

Role Stress :

We are living in an era of growing complexities and pressure where human constitution and capacities are being taxed severely. The stresses relating to job have become predominant feature of modern life, exerting far-reaching effects on focal employee's behaviour and adjustments as well as off-the-job.

Job stress is generally defined din times of relationship between person and environment. Mc Grath (1976) has noted that a stress involves an interaction of person and environment. To define stress he said “..... there is a potential for stress when an environmental situation is perceived as presenting demand which threatens to

exceed the person's capabilities and resources for meeting it, under conditions where he expects a substantial differential in the rewards and costs from meeting the demand of not meeting it."

Psychologist and management scientists have different views about potential Psychological and situational conditions or job factors which cause job stress.

Stress is the excitement, feeling of anxiety, and/or physical tension that occurs when the demands placed on an individual are thought to exceed his ability to cope. Stress can be divided into two types, acute stress and chronic stress. Acute stress is short-termed and it is the reaction to an immediate threat, commonly known as the 'fight or flight' responses. Common acute stressors are: noise, crowding, isolation, hunger, danger, infection or remembering a dangerous event. Under most circumstances once the acute threat has passed, the bodily reaction returns to the normal, but when stressful situations come frequently, it, then become chronic which is long-term in nature. Common chronic stressors are: on-going highly pressured work, long-term relationship problems, loneliness and persistent financial worries.

Occupational Stress :

According to Dorsey (1994) and Karasek and Theorell(1990) for many people, a great deal of stressful events come from the workplace. Murphy(1995) found in a national survey of 600 workers, 46 percent of the subjects believed that their jobs were very stressful and more than a quarter of them said that the job was the greatest cause of stress in their lives. A 25-year report, published recently in the British Medical Journal, showed that stress at work more than doubles the risk of death from heart disease.

Occupational stress is experienced when the demands of the work environment exceed the employees' ability to cope with (or control)them. Stress is not a disease, but if it is intense and goes on for some time, it can lead to mental and physical ill health. Being under pressure one can improve performance and give satisfaction when challenging objectives are achieved. It motivates individuals to learn new skills and master our jobs. When a challenge is met, we feel relaxed and satisfied. But when the challenge has turned into job demands that cannot be met, relaxation has turned to exhaustion, and a sense of satisfaction has turned into feelings of stress. In short, demand and pressures become too much, they lead to stress.

Mental Health : Health is an indispensable quality in human being. It has been described as soil from which the finest flowers grow. Health indicates psychosomatic well-being. To Bhatia (1982) " health is a state of being hale, sound or whole in body and mind".

The preamble of the World Health Organization's charter defined health as a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity (Monopolis et al. 1977).

Thus, health is a broader concept including physical, social, and mental health. Mental health has been reported as an important factor influencing individual's various behaviours, activities, happiness, and performance.

Job Involvement :

Job involvement plays a vital role in the modern era of employment crisis disappointment, dissatisfaction and stress. In fact, job involvement is widely studied aspect of organizational psychology. It is quite necessary to understand the human relations in industry because they explain why one man works harder than another, why one group of workers restricts its output and another works energetically, Why one group goes on strikes and the other does not.

The Concept of Anxiety :

Anxiety is a multisystem response to a perceived threat or danger. It reflects a combination of biochemical changes in the body, the patient's personal history and memory, and the social situation. As far as we know, anxiety is a uniquely human experience. Other animals clearly know fear, but human anxiety involves an ability, to use memory and imagination to move backward and forward in time, that animals do not appear to have. The anxiety that occurs in post-traumatic syndromes indicates that human memory is a much more complicated mental function than animal memory. Moreover, a large portion of human anxiety is produced by anticipation of future events. Without a sense of personal continuity over time, people would not have the "raw materials" of anxiety.

Tools used for Data collection :

Following Psychological tools were used for data collection.

1). Occupational stress Index :

This instrument was constructed and standardized by Dr. A.K. Shrivastava and Dr. A. P. Singh. (1981).

Purpose : The occupational stress Index purports to measure the extent of stress which employees

perceive arising from various constituent and conditions of their job. However, stress researchers have developed the scales which measure the stress arising exclusively from job roles. (Rizzo, et al 1970; Pareek 1981). The tool may conveniently be administered to the employees of every level operating in context of industries or other non-production organizations.

Main features of the tool :

The scale consists of 46 items, each to be rated on the five-point scale. Out of 46 items, 28 are 'true-keyed' and rest 18 are 'false-keyed'. The items relate to almost all relevant components of the job life which cause stress in some way or the other, such as, role over-load, role ambiguity, role conflict, group and political pressures, responsibility for persons, under participation, powerlessness, poor peer relations, intrinsic impoverishment, low status, strenuous working conditions, and unprofitability.

2). **Mental health inventory :**

This instrument was constructed and standardized by Dr. Jagdish and Dr. A.K. Shrivastava.

The present 'Mental Health Inventory' (MHI) has been designed to measure mental health (positive) of normal individuals. Though, there are some scales for measuring mental health but most of them tend to assess mental ill health rather than mental health.

The details of the dimensions of mental health is as follows:

1. **Positive Self-Evaluation (PSE) :** It includes self-confidence self-acceptance, self identity, feeling of worthwhileness, realization of one's potentialities, etc.
2. **Perception of Reality (PR) :** It is related to perception free from need distortion, absence of excessive fantasy and a broad out look on the world.
3. **Integration of personality (IP):** It indicates balance of psychic forces in the individual and includes the ability to understand and the share other people's emotions, the ability to concentrate at work and interest in several activities.
4. **Autonomy : (AUT):** It includes stable set of internal standards for one's action, dependence for own development upon own potentialities rather than dependence on other people.
5. **Group Oriented Attitudes (GOA):** It is associated with ability to get along with others, work with others and ability to find recreation.
6. **Environmental Mastery (EM):** It includes efficiency in meeting situational requirements, the

ability to work and play, the ability to take responsibilities and capacity for adjustment.

Job Involvement scale :

Job involvement Scale was developed and standardized by Singh (1994). The preliminary schedule of the scale consisted 72 items out of which 54 items were finally selected for the scale on the basis of item analysis. The 54 items which were constituting the scale related to the following areas:

1. Intrinsic motivation.
2. Attachment to work.
3. Fulfillment of Organizational demand.
4. Internalization of Organizational goals.
5. Organizational identification.

Each statement in the scale has four response alternatives, namely, strongly agree, agree, disagree, and strongly disagree. The items of the scale were framed in such a way that they can be used for measuring the degree of involvement of all the subjects irrespective of the nature of their work,

Organizations, and machines and tools they use. The job involvement scale work used to measure the employees job involvement in some earlier researches (Srivastava, 1986, 1988; Singh and Srivastava, 1984, 1986).

Objectives of the study :

1. To find out the level of occupational stress among Maharashtra Police constables. (Rural & Urban area).
2. To find out the level of job involvement among Maharashtra Police constables (Rural & Urban area).
3. To find out the level of Mental Health among Maharashtra Police constables (Rural & Urban area).

Hypotheses :

1. (a). There would be no significant differences between the level of occupational stress among Male & Female Police constables of Rural & Urban area.
(b). Occupational stress would be high in urban area police constables than rural area police constables.
2. Job involvement would be high in Male Police constables than Female Police constables in urban area police constables.
3. Job involvement would be high in Male Police constables than Female Police constables in Rural area .
4. Mental Health would be high in Male Police constables than Female Police constables in Rural area .

police constable is 153.32 & S.D. 21.5, obtained t-value is 0.033 which is not significant at both the levels. On the basis of mean, it is concluded that female police constables are less satisfied than male police constables and rejects the said hypothesis. i.e. the level of occupational stress would be high in male police constables than female police constable.

Table No.IV :

Following table shows the differences between police constables working in rural & urban area for dependent variable Occupational Stress.

Group	N	Mean	S.D.	T	Significance
Urban	50	183.88	28.15		Significant at both the level
Rural	50	135.12	11.37		

In the above table the mean value of occupational stress of Urban police constables is 183.88 & S.D. is 28.15. as well as rural police constables mean is 135.12 & S.D. is 11.37. Obtained t-value is which is : Significant at 0.05 & 0.01 level of significance. On the basis of mean it is concluded that rural police constables are in a low stress level than urban police constables. Hence the Hypothesis 'I(b)' have been accepted. As stated previously : the occupational stress would be high in urban area police constables than rural area police constables.

Table No. :V

Descriptive statistics of dependent variable "Mental-Health".

Area of Working	Gender of Police.	M	S.D.	N
Urban police constables.	M	132.57	8.06	50
	F	144.84	9.70	50
	Total	138.75	8.88	100
Rural police constables.	M	138.42	11.52	50
	F	158.14	9.52	50
	Total	148.28	10.52	100

In the above table no. "V", descriptive statistics of the dependent variable Mental Health was shown. Mean of the Male Police Constables on Mental Health score is 132.57 & S.D. 8.06, whereas for female police constables the Mean value of Mental Health is 144.87 & 9.70. The Male police constables working in the rural area their mean value on Mental is 138.42 & S.D. 11.52 as well as for female police constable Mean 158.14 & S.D. 9.52 which shows the level of Mental Health among these two groups.

TABLE No. VI

Following table shows differences between Male & Female constables (Urban Area) for Dependent variable Mental Health.

Group	N	Mean	S.D.	t	Level significance.
Male	50	132.57	8.03	35.57**	Significant at both the level.
Female	50	144.84	9.7		

df = 98, table value 0.01 = 2.63 & at 0.05 = 1.98

In the above table the mean value of Male police constables of urban area for Mental Health is 132.57 & S.D. 8.03 as well as for female constables the mean value on Mental Health is 144.84 & S.D. 9.7, obtained t-value is 35.57 which is significant at 0.5 & 0.1 level of significance. On the basis of Mean it is concluded that Male police constables are in a poor mental health as compared to female police constables from urban area.

Hence the hypothesis no. 'V' have been accepted.

TABLE No. VII

Following table shows differences between Male & Female constables (Rural Area) for Dependent variable Mental Health.

Group	N	Mean	S.D.	t	Level significance.
Male	50	138.42	11.52	46.95**	Significant at both the level.
Female	50	158.14	9.52		

df = 98, table value 0.01 = 2.63 & at 0.05 = 1.98

In the above table the mean value for Male police constables on Mental Health is 138.42 & S.D. 11.52 as well as for female constables the mean value on Mental Health is 158.14 & S.D. 9.52, obtained t-value is 46.95 which is significant at 0.5 & 0.1 level of significance. On the basis of Mean it is concluded that Female police constables are in a better Mental Health than Male police constables in rural area.

Hence the hypothesis no. 'IV' have been accepted.

As stated previously the level of Mental Health would be high in female constables than male constables from rural area.

Table No. :VIII

Descriptive statistics of dependent variable "Job Involvement

Area of Working	Gender of Police.	M	S.D.	N
Urban police constables.	M	154.7	21.87	50
	F	146.06	18.05	50
	Total	150.38	19.96	100
Rural police constables.	M	160.61	8.42	50
	F	152.42	9.73	50
	Total	156.51	9.07	100

In the above table no. "VIII", descriptive statistics of the dependent variable 'Job Involvement', was shown. The Mean value of the Male Police Constables for Job Involvement (URBAN) is 154.07 & S.D. 21.87, and The Mean value of the Female Police Constables for Job Involvement (URBAN) is 146.06 & 18.05 whereas for Male

5. Mental Health would be high in Male Police constables than Female Police constables in Urban area .

Variables under study :

The following variables are considered in the study.

1. Independent Variables :
 - (a). Male Police constables.
 - (b). Female Police constables.
 - (c). Area of working place.
2. Dependent Variables :
 - (a). Occupational stress.
 - (b). Mental Health.
 - (c). Job Involvement .

METHODOLOGY:

Sample :

A sample comprised of total 200 police constables. It includes 100 Male & 100 female constables. The age of the subject will be 25 to 40 years. There were four groups of subjects in each group there were 50 police constables. The distribution of the total sample is depicted as follows:

AREA					
SEX	Rural		Urban		Total
	Male	50	50	100	
	Female	50	50	100	
	100	100	200		

❖ Research design :
2 x 2 Factorial design was used.

AREA (A)					
SEX (B)		Rural (A1)		Urban (A2)	
		Male (B1)	A1.B1	A2.B1	
		Female (B2)	A1.B2	A2.B2	

- 1). Area (A) : Rural (A1)
Urban (A2)
- 2). Sex (B) : Male (B1)
Female (B2)

STATISTICAL ANALYSIS :

In the present study two-way ANNOVA, t-test, Descriptive statistics, and graphical presentation of the two groups of the mean are used for analysis of the data.

Descriptive Statistics :

Table No. : I

Descriptive statistics of dependent variable “ Occupational stress ”.

Area of working	Gender .	Mean	S.D.	N
Urban	M	191.16	26.98	25
	F	176.40	29.33	25
Rural	M	140.	9.07	25
	F	130.24	13.67	25

The above table no. 'I' shows the descriptive statistics of the dependent variable “ Occupational ” stress. The mean of the male police constable on occupational is 191.16 & for female 176.40 , whereas for male S.D. 26.98 & S.D. for women 29.33 . The male & female police constables working in the rural area the mean for male police constables 140 & S.D. 9.07 & for female 130.24 & S.D. 13.67 , which shows the level of occupational stress among these two groups.

Table No. : II.

Following table shows univariate analysis of variance for the dependent variable Occupational Stress .

	Source	Type III sum of Square .	df	Ms	F	Sign
Ass	Area of working	165694.5	1	165694.5	69.74	Significant at both the level
Bss	Sex	58769.3	1	58769.3	24.73	
ABss	Area x Sex	161631	1	161631	68.03	
Wss	Error	223275.20	96	2375.78		

In the above table two way univariate analysis of variance shows that the first main effect of working i.e. urban & rural area. The value F(1,96) = 69.74 , which is significant at 0.01 & 0.05 level .

The second main effect is Sex (Male , Female) F(df 1,96) value is 24.73 which is significant at 0.01 & 0.05 levels hence male & female police employees shows significant difference in terms of their occupational stress.

For search out the differences between two means post-hoc test i.e. have been employed.

Table No. : III.

Following table shows differences between Male & Female Police constables for dependent variables Occupational Stress.

Group	N	Mean	S.D.	t	Significant level.
Male	50	165.58	18.02	0.033	Non-Significant accepted
Female	50	153.32	21.5		

In the above table the mean value of the male police constables is 165.58 & S.D. 21.5 as well as the mean of occupational stress of female

police constables (RURAL) the Mean value for Job Involvement is 160.61 & 8.42 and for female police constables (RURUAL), their mean value for Job involvement is 152.42 & S.D. 9.73, which shows the level of Job Involvement among these two groups.

TABLE No. IX

Following table shows differences between Male & Female constables (Urban Area) for Dependent variable Job Involvement.

Group	Mean	S.D.	N	t	Level of significance.
Male	154.7	21.87	50	18.2452	Significant at both the level.
Female	146.06	18.05	50		
Total	150.38	19.96	100		

In the above table the mean value for Male police constables for Job Involvement is 154.7 & S.D. 21.87 as well as for female constables the mean value on Job Involvement is 146.06 & S.D. 18.05, obtained t-value is 18.2452 which is significant at 0.5 & 0.1 level of significance. On the basis of Mean it is concluded that Male police constables Job Involvement is more than Female police constables (in Urban Area).

Hence the hypothesis no. ' II ' have been accepted.

As stated previously the level of Job Involvement would be high in Male constables than Female constables from Urban area .

TABLE No. X

Following table shows differences between Male & Female constables (Rural Area) for Dependent variable Job Involvement.

Group	Mean	S.D.	N	t	Level of significance.
Male	160.61	8.42	50	22.75**	Significant at both the level.
Female	152.42	9.73	50		
Total	156.51	9.07	100		

df= 98 , table value 0.01 = 2.63 & at 0.05 = 1.98

In the above table the mean value for Male police constables for Job Involvement is 160.61 & S.D. 8.42 as well as for female constables the mean value on Job Involvement is 152.42 & S.D. 9.73, obtained t-value is 22.75 which is significant at 0.5 & 0.1 level of significance. On the basis of Mean, it is concluded that Male police constables Job Involvement is more than Female police constables (in Rural Area).

Hence the hypothesis no. ' III ' have been accepted.

As stated previously the level of Job Involvement would be high in Male constables than Female constables from Urban area .

Discussion :

In the table no. I, II, III & IV shows that mean value of Occupational Stress scores obtained by Police Constables working in Rural & Urban areas both for Male & Female constables. As well as F And T values are also shown in this table.

The first dependent variable occupational stress has also impact of sex and working place. As shown in the table No. 5,6,7, the main effect of working F (69.74, df 1,96) is significant (PL 0.01 & 0.05) at both the levels. As per the table Vth , the mean value of Urban area police constables on occupational stress index is 183.78 and for rural area constables 135.12. It indicates that urban area police constables are suffering for high stress than Rural Area constables . As the above results are supported by the study of Fiona H and Biggam el al (200), who reported more stress in urban police constables due to unbalancing job demands and job-pressure on urban area.

The second independent variable i.e. job involvement. The mean score on job involvement for Male constables is 154.7 & S.D. 21.87 & for women police constables, the mean score is 140.6 & S.D. is 18.5 . Obtained 't' value is 18.24. On the basis of the mean score, it was concluded that Male police constables are highly involve in their job but for female constables their involvement was found low. It is due to the gender differences and the responsibilities given by the authority.

While considering the job involvement for Rural Area Police constables , the mean score for job involvement for Male is 160.61 and S.D. 8.42 & for female police constables mean score on job involvement as indicated in table no. X is 152.42 & S.D. 9.73 . The obtained t-value is 22.75, it is significant at 0.01 & 0.05 level. On the basis of the Mean it was concluded that Male police constables from rural area are highly involve in their job than female police constables.

The third independent variable is mental health. The mean score of Mental Health (Urban Area) of Male constable is 132.87 & S.D. 8.06 . It shows the poor Mental Health indication of Male police constables . On the other part as indicated in Table No. VI, the mean score of mental health was found 144.84 & S.D. 9.7 . It shows the average mental health of female police constables obtained t-value is 34.08 which is significant at both the level.

In the above table VII the mean value of Mental Health (Rural Area) is 138.42 & S.D. 11.52 as well as for female constables the mean value on Mental

Health is 158.14 & S.D. 9.52, obtained t-value is 46.95 which is significant at 0.5 & 0.1 level of significance. On the basis of Mean it is concluded that Rural police constables are in a poor mental health than female police constables.

On the basis of statistical analysis it was concluded that :

1. Urban police constables are more Involved in their Job than Rural police constables .
2. Male police constables are more Involved in their Job than Female police constables in Rural area.
3. Occupational stress is high in urban area police constables than rural area police constables.
4. Occupational stress is high in male police than female police constables.
5. Mental Health of Rural area constables is as well as good than Urban area constables.
6. Mental Health of Female police constables is as well as good than Male police constables.

Suggestions:

After the completion of Research project on the basis of conclusions drawn by the researcher it is recommended that while recruiting the police force Psychological Test and some personality dimension should be measured. For this purpose following attempts should be made for the employees better mental health.

1. Develop training programs for stress management.
2. Develop counseling programs for better job involvement.
3. Develop operational departmental policies that are directed for reducing stress & for better mental health. It includes scheduling of work hours, work-load & better job-involvement.
4. Use of relaxation & Yoga techniques for management of stress & well-being.
5. Use of spouse & family development programs.
6. Implementation of total wellness programs.
7. To increase the quality of life at work place.
8. Deacresing Work-hours, work load, role-overload & role-ambiguity one can get optimum values of work.

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