

## **Social Support as a Moderator in Stress**

Strain Relationship among Women Police

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Social support is the most important of the situational factors being explored as a moderator variable. Social support is information leading a person to believe that he is cared for, esteemed, and a member of a network of communication and mutual obligation (Cobb,1976).Not all forms of social support are equally protective against stress(Lieberman,1982).But, different source of social support may be more effective for particular stressors. Similarly, the beneficial effects of social support need not be necessarily cumulative. Moreover, excessive or overly intrusive social support is found to exacerbate stress (Lieberman,1982;Suls and Helles,1983).Social support may have direct or moderating effects on job stress and subsequent outcomes. A number of studies have highlighted the role of social support as a moderator of the effects of stress (Nuckolls et al.,1972; De Araujo et al.,1973; Antonovsky,1974; Cobb,1976; Joseph,1989). Occupational stress research, particularly those incorporating moderator variables in the research design are very limited in India. Moreover, very few studies on job stress have been conducted in India exclusively on the women police personnel.

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## **OBJECTIVE**

To examine the moderating effect of different sources of social support on stress- strain relationship among the women police personnel.

## **HYPOTHESIS**

Social support from different sources will have a moderating effect on stress- strain relationship.

## **PROCEDURE**

After obtaining permission to conduct the study from the concerned authority, the respondents were selected using stratified random sampling. For this, separate lists of women police personnel belonging to the different job levels were prepared and from these lists, a representative number of participants belonging to each job level were taken using random numbers.

Representation was given to all the three police regions in selecting the subjects. Men police personnel were selected randomly from Ernakulam district.

## **METHOD**

### **Participants**

The participants comprised of 400 women police personnel belonging to three job levels (Civil police officer, Senior civil police officer & Sub Inspector) drawn randomly from various police stations in Kerala. The age of the respondents ranged from 26 to 55 years.

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### **Tools**

Only questionnaire measures were used in the present study, and these consisted of one stress measure and six strain measures.

#### ***Stress Measure***

The 'Occupational Stress Inventory' developed by Joseph and Dharmangadan (Joseph, 1989b) specifically aimed at police personnel was used to measure the perceived job stress. The inventory consists of 120 items divided into 26 subscales. Each item is provided with a 5-point response category from 'strongly agree=5' to 'strongly disagree=1'. The items are scored in such a way that a high score indicates greater perceived stress. In addition to the 26 subscale scores, all the subscale scores may be added to obtain a total stress score. All the 26 subscales are reported to have high reliability coefficients (cross-sectional and split-half) ranging from .67 to .97. The inventory had a correlation of .93 with the 'Occupational Stress Index' (Srivastava & Singh, 1984) indicating high validity.

#### ***Strain Measures***

Three job-related strains and three affective strains were measured using the following scales.

#### ***Job – Related Strains (Job Satisfaction, Work Load Dissatisfaction and Boredom)***

The 'Job Dissatisfaction Scale' developed by Quinn and Sheppard (1974) was used to measure the level of satisfaction from the job. The scores on each item are added together to get a total dissatisfaction score. A high score indicates greater dissatisfaction and vice versa.

The 'Work Load Dissatisfaction' measures how satisfied are people with the work load in their jobs. The scale was developed by Caplan et al. (1975). The scores of the responses are added together to get the total work

load dissatisfaction score. A high score indicates greater dissatisfaction with work load.

The 'Boredom Scale' (Caplan et al., 1975) measures the feelings one has about his work. The scale has both true-keyed and false-keyed items and the false-keyed item is reverse scored and the scores in all the items are added together to constitute the boredom score, a high score indicating greater feelings of boredom.

**SOCIAL SUPPORT**

The main moderator variable examined in the present study was the measures of social support. The measure consists of three different scales, each having four parallel items, in order to measure support from (a) supervisors (b) from others at work and (c) from wife/husband, friends and relatives. The support measures are based on the research, both theoretical and empirical, carried out by Pinneau(1972), Taylor and Bowen(1972), Likert(1961), and Gore(1973). Each of the three scale has a '4 -point response scale from 'Very much' to 'Not at all'; a 'O' category (don't have any such person) is also given, and while scoring the 'zero' category response is assigned a missing data value. Thus, a high score indicates more social support perceived by the individual. The test is found to be a good measure of the qualitative aspects of social support and has high reliability and validity coefficients. (Caplan et al., 1975)

**RESULTS AND DISCUSSION**

Table 4.45 Correlations between Different Stress Measures and the Three Sources of Social Support

Stress Variables	Support from superiors	Support from Co-workers	Support from husband/relatives
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Quantitative Overload	.001	-280**	-.042
Qualitative Overload	.046	.043	-.135**
Role Ambiguity	-.033	-.203**	-.016
Role Conflict	-.073	-.124*	-.008
Lack of Participation	-.032	-.101*	-.063
Lack of Autonomy	-.181**	-.051	-.116*
Group Pressures	-.091	-.377**	-.006
Lack of Challenges	-.074	-.011	-.069
Lack of Control	-.017	-.252**	-.096
Inter Personal Relationship	-.014	-.035	-.024
Problems with courts	-.008	-.030	.089
Responsibility	-.210**	-.029	-.257**
Promotions	-.128*	-.082	.021
Job Security	-.101*	-.225**	-.053
Victimization	-.102*	-.044	-.032
Negative Public Attitude	-.053	-.037	-.040
Alienation	-.014	-.074	-.017
Perceive Status	-.149**	-.172**	-.060
Strenuous Working Condition	-.140**	-.025	-.003
Emergency Situation	-.092	-.300**	-.134**
Inadequate Grievance Representation	-.070	-.026	-.105*
Rigid Rules	-.001	-.077	-.064

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Inadequate Pay	-.018	-.123*	-.006
Transfer Policies	-.092	.156**	-.027
Schedules of Working Time	-.074	-.021	-.083
Home Work Pressure	-.126*	-.027	-.036

\*Significant at the .05 level

\*\*Significant at the .01 level

#### **PREVENTIVE EFFECT OF SOCIAL SUPPORT**

As suggested by Pinneau (1976) and House (1981), social support may have a preventive effect on stress. In other words, this hypothesis states that in the presence of social support job stressors are either not perceived or reduced. This has been tested by computing the correlations between job stress and scores obtained in social support from the three sources (Table 4.45).

In the case of social support from superiors (Table 4.45) all the correlations are found to be negative in direction, indicating that increase in support at work from the superiors lead to decrease in the levels of perceived stress. However, most of these correlations are found to be non significant, indicating that superior support is not significantly related to perceived stress from these sources. Out of the 26 stress variables, only eight are found to be significantly negatively related to support from superiors. Again, the magnitude of these correlations indicate only weak relationships even in the case of significant ones. The job stresses having significant negative correlations with superior support are : lack of autonomy ( $r = -.18$ ), responsibility ( $r = -.21$ ), promotions ( $r = -.13$ ), job security ( $r = -.10$ ), perceived status ( $r = -.15$ ) strenuous working conditions ( $r = -.14$ ) and home-work pressures ( $r = -.13$ ). In the case of these variables, the

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support received at work from the superiors may be helping them to reduce the stress arising out of them.

The results obtained in the case of superior support in the present study do not show much direct main effect of support on perceived job stress. Many earlier studies have demonstrated the preventive value of supervisor support (e.g., Cohen and Wills, 1985; Kasl and Wells, 1985). Moreover, Kroes et al., (1974), Davidson and Veno (1980), Kirmeyer and Dougherty (1988), and Joseph (1989) have pointed out that police as an occupational group are particularly in need of social support from superiors. But the results of the present study do not agree with the findings of earlier studies. Perhaps the women police personnel may not be having problems that can be relieved by the support received from the superiors.

From Table 4.45., It can be seen that social support from others at work is having negative correlations with all the job stresses, indicating that increases in support leads to reduced levels of job stress. Out of the 26 correlations obtained only eleven correlations are found to be significant in this case. Again, the magnitude of these correlations indicates only moderate degree of associations between support and the concerned job stresses. The stress variables having significant correlations with support from others at work include: quantitative overload ( $r=-.28$ ), role ambiguity ( $r=-.20$ ), role conflict ( $r=-.12$ ), lack of Participation ( $r= -.10$ ), group and political pressures ( $r= -.38$ ), lack of control ( $r= -.25$ ), job security ( $r=-.23$ ) perceived status ( $r=-.17$ ), emergency situations ( $r= -.30$ ), inadequate pay ( $r=-.12$ ) and transfer policies ( $r= -.16$ ). Despite the fact that these are only moderate or low correlations, it can be seen that all these sources of stress are the ones which can be reduced or shared by one's colleagues and subordinates.

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Correlations between the various job stresses and social support from people outside the work (husband, friends and relatives) also yielded negative correlations. However, most of the obtained correlations are non-significant. Only five out of the twenty-six correlations are significant here. Moreover, the magnitudes of these correlations are low, indicating only weak associations between this source of social support and the perception of job stress. The stress variables which yielded significant correlations with social support from family and friends are qualitative overload ( $r=-.16$ ) lack of autonomy ( $r= -.12$ ) responsibility ( $r= -.26$ ) emergency situations, ( $r=-.13$ ) and inadequate grievance representation ( $r= -.11$ ).

The results obtained in this section do not provide strong evidence for the preventive effect of social support. Moreover, the present results are contradictory to the results obtained in earlier studies, including police sample (e.g., La Rocco et al., 1980; Payne, 1980; Wells, 1982; Seers et al., 1983; Fisher, 1985; Joseph and Varghese, 1988; Joseph, 1989). In most of these studies, the samples were male employees. The question whether there are gender differences in the effect of social support on job stress have to be explored further. Thus, the results obtained in this section provide only weak and partial support for the preventive effect of social support as proposed in hypothesis 11.

#### **THERAPEUTIC EFFECT OF SOCIAL SUPPORT**

The direct main effects of social support on strains (therapeutic effect) have been tested by computing the correlations between the three sources of social support and the various job strains (Table 4.45). The directions of all the correlations are found to be negative indicating that the association between these variables is such that an increase in support leads to a decrease in the strain.

From Table 4.45.it can be seen that in the case of superiors' support, out of the seven correlations, 4 are significant. However, most of these correlations are rather low in magnitude indicating significant but weak relationships between social support at work from superiors and the concerned strain variables. The strain variables which yielded significant correlations are job dissatisfaction ( $r = -.13$ ), depression ( $r = -.34$ ) irritation ( $r = -.13$ ) and psychosomatic complaints ( $r = -.17$ ). Thus the results indicate that social support from superiors is having some degree of therapeutic effect on the women police, such that the perception of social support reduces the impact on strains.

In the case of social support from others at work, there are only two significant correlations, that with job dissatisfaction ( $r = -.11$ ) and work load dissatisfaction ( $r = -.12$ ). All other correlations are found to be non significant. This shows that support from others at work are not having much impact on the affective strains and psychosomatic complaints of the women police personnel.

From Table 4.45.it can be seen that none of the correlations between support from husband, family and friends and the strains are significant. This indicate that this source of social support do not have any therapeutic effect on the strains of women police personnel.

Results obtained in this section provide only weak support for the direct main effect of social support (therapeutic effect). Of the three sources of social support, support from superiors is found to be of more impact, followed by support from others at work. Support from family and friends are found to be of the least importance in this respect. This finding is quite surprising in the light of previous findings as well as normal expectations. Usually women are found to find solace in the family, especially on the spouse at times of stress. But in the case of the present sample (women police) this is found not to be true. In the case of preventive effect also the trend was the same. Whether this is true of women

employees in general, or only in the case of women police is to be explored further in future studies. Perhaps the nature of the police work is such that the family could not extend a helping hand to the women personnel, as is possible in the case of other professions. The results regarding the therapeutic effect of social support is not in full agreement with the results obtained in previous studies (e.g., Caplan et al., 1975; La Rocco and Jones, 1978; La Rocco et al., 1980; Abdel-Halim, 1982; Seers et al., 1983; Fisher, 1985; Joseph and Varghese, 1988; Joseph, 1989).

Thus the results obtained in this section provide only weak and partial support for the therapeutic effect of social support proposed in hypothesis 11.

The moderating effects of social support from three sources - superiors, colleagues, husband, friends and relatives- on the job stress - strain relationship are examined. The results are presented in the order, support from superiors, colleagues, and then support from husband, friends and relatives.

### **B.1. Social Support - Superiors**

The results of the moderated regression with respect to the different strain variables and superior support are presented below.

Table 1. Moderating effect of Social support from superiors on stress-*job dissatisfaction* relationship.

Source	Type III sum of squares	df	Mean square	F	Sig
Model	1954.069(a)	230	8.496	514.789	.000
Total stress x support from superiors	1954.069	230	8.496	514.789	.000

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Error	2.806	170	.017		
Total	1956.875	400			

a R squared = .999 (Adjusted R squared =.997)

The results presented in the table show that the F - value for both the model, and total stress X support from superiors is 514.789, which is significant at the .01 level. The interaction between the independent variable of stress and the moderating variable of superior support affect the dependent variable of job dissatisfaction. This means that the interaction between total stress and support from superiors moderated the effect of stress on job dissatisfaction of the subjects.

Table 2. Moderating Effect of Superior Support on Stress-*Workload* Dissatisfaction Relationship

Source	Type III sum of squares	df	Mean square	F	Sing
Model	38092.454(a)	230	165.619	329.124	.000
Total stress x support from superiors	38092.454	230	165.619	329.124	.000
Error	85.546	170	.503		
Total	38178.000	400			

a R squared =.998 (Adjusted R squared =.995)

From Table 2, it can be seen that F-value obtained for both the model and independent variable x moderating variable is 329.124, which is significant at the .01 level. The relationship between independent variable (total stress) and

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dependent variable (workload dissatisfaction) is moderated by support from superiors. It means that the effect of stress on boredom is moderated by support from superiors.

Table 3. Moderating effect of superior support on stress-*boredom* relationship

Source	Type III sum of Squares	df	Mean square	F	Sig
Model	32305.059(a)	230	140.457	298.691	.000
Stress X Support from Superiors	32305.059	230	140.457	298.691	.000
Error	79.941	170	.470		
Total	32385.000	400			

a R squared= .998 (Adjusted R squared=.994)

The results show that the F-value for both model and total stress x support from superiors is 298.691, which is significant at the .01 level. The interaction between the independent variable and the moderating variable is affecting the dependent variable, which means that the relationship between stress and the strain variable boredom is being moderated by support from superiors.

The above results with respect to the moderating effect of social support from superiors on the stress-strain relationship clearly show the importance of social support at work received from the superiors, in the case of the women police personnel. The finding that superior support is having significant moderating effects in the case of all the strain variables examined, point to the value of superior support in the face of stress especially for the women police. A

plethora of studies have shown the moderating effect of superior support for the subordinates (Nuckolls et al.,1972; Cobb, 1976; Joseph, 1989; Frank and Stephens, 1996; Glazer and Bell, 2003).

**Social support- Colleagues**

This section provides the results of the moderator analyses with respect to support at work provided by one’s colleagues and others at work.

Table 4.Moderating Effect of Support from Co-Workers on Stress-*Job Dissatisfaction* Relationship

Source	Type III sum of Squares	df	Mean square	F	Sig
Model	1953.224(a)	230	8.492	395.399	.000
Stress X support from co-workers	1953.224	230	8.492	395.399	.000
Error	3.651	170	.021		
Total	1956.875	400			

a R squared=.998 (Adjusted R squared=.995)

The results presented in the above table indicate that the F- value for both the model and total stress X support from co-workers (395.399) is significant at the .01 level. This indicates that the relationship between stress and the strain variable of job dissatisfaction is moderated by support from co-workers.

Table 5.Moderating Effect of Support from Co-Workers on Stress-*Work Load* Relationship

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Source	Type III sum of Squares	df	Mean square	F	Sig
Model	38101.787(a)	230	165.66	369.519	.000
Stress X support from co-workers	38101.787	230	165.66	369.519	.000
Error	76.213	170	.448		
Total	38178.000	400			

a R squared =.998 (Adjusted R squared=.995)

The results presented in Table 6 show that the F-value for both the model, and stress x support from co-workers is significant. The interaction between the independent variable of stress and the moderating variable of support from coworkers affecting the dependent variable work load dissatisfaction.

Table 6. Moderating Effect of Social Support from Co-Workers on Stress-*Job Boredom* Relationship

Source	Type III sum of Squares	df	Mean square	F	Sig
Model	32261.368(a)	230	140.27	192.87	.000
Stress x support from co-workers	32261.368	230	140.27	192.87	.000
Error	123.632	170	.727		

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Total	32385.000	400			
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a R squared =.996 (Adjusted R squared=-.991)

The results indicate that the F - value for both the model, and total stress X support from co-workers is 192.87, which is statistically significant at the 0.01 level. This indicates that the relationship between stress and the strain variable of boredom is moderated by social support from co-workers.

The results presented in Table ....., show that the F-values for both the model, and stress x support from co-workers is significant. The relation between the independent variable (stress) and the dependent variable (irritation) is being moderated by support from co-workers.

The results obtained in this section show that support at work received from the co-workers also is having high significance for the women police personnel. It helps them in buffering the impact of various stresses and problems faced in the job. A number of earlier studies also have pointed out the significance of co-worker support as a moderator variable.(e.g., Pinneau, 1975; Cooper and Marshall, 1976; Ford, 1985; Timpka and Sjoberg, 1998; Viller and Sommerville, 2000).

In the case of the present sample it is found that all the strains examined are significantly buffered by co-worker support.

**B.3. Social support- Husband, Friends, and Relatives**

The moderating effects of support from family and friends on the relationships between stress and the various strains are examined and given below.

Table 7. Moderating effect of support from family and friends on stress – job dissatisfaction relationship

Source	Type III sum of squares	df	Mean square	F	Sig.
Model	1952.385(a)	230	8.489	321.397	.000
Stress x support from husband	1952.385	230	8.489	321.397	.000
Error	4.49	170	0.26		
Total	1956.875	400			

a R squared =.998 (Adjusted R squared=.995)

The results presented in Table 7 indicate that the F – value for the model, and total stress x support from husband \ relatives is 321.397 which is significant at the .01 level. The relationship between stress and the strain variable job dissatisfaction is moderated by support from husband/friends and relatives.

Table 8. Moderating effect social support from family and friends stress – work load dissatisfaction relationship

Source	Type III sum of squares	df	Mean square	F	sig.
Model	38078.1999(a)	230	165.557	282.008	

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Stress x support from husband	38078.199	230	165.557	282.008	
Error	99.801	170	0.587		
Total	38178	400			

a R squared =.997 (Adjusted R squared=.994)

From the above table, it can be seen that the F – value for the model, and stress x support from husband \ relatives is 282.008, which is significant at the .01 level. The relationship between stress and the strain variable of work load dissatisfaction is moderated by support from husband \ relatives.

Table 9. Moderating Effect of Support from Family and Friends on Stress – Boredom Relationship.

Source	Type III sum of squares	Df	mean square	F	Sig.
Model	32304.379	230	140.454	296.16	.000
Stress x support from husband	32304.379	230	140.454	296.16	.000
Error	80.621	170	0.474		
Total	32385	400			

a R squared =.998 (Adjusted R squared=.994)

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The results presented in the above table show that the F – value obtained for the model, and stress x support from husband \ relatives is 296.16, which is significant at the .01 level. The relationship between stress and the strain variable of boredom is moderated by support from husband \ relatives. The above finding is being supported by a large number of research findings. In this context Thomas (1995) observed that family is a particularly important source of social support and can significantly moderate the impact of stress. Both men and women are more likely to turn to a spouse than to anyone else during times of stress (Miller and Surtees, 1994). There is clear evidence that husbands and wives do provide valuable emotional support for each other (Greenwood et al., 1996). The moderating role of family support has been highlighted in other studies also (Vickers, 1979; Ford, 1985; Faller et al., 1995).

Thus, results presented in the above section clearly show that support from the three sources (superiors, friends, husband/ relatives) had significant moderating effects on the relationships between stress and various strain variables for the police personnel. All the 21 possible moderating effects tested are found to be significant. These results show that stress do not cause negative outcomes if social support is present, but does if social support is absent. Here the results show that in the case of women police personnel all the three sources of support examined are highly significant. In other words, it buffers individuals from the potentially pathogenic influence of stress.

Emotional support was found to be more effective in predicting episodic job stress, chronic job stress, job burnout and health consequences (Ford,1985). Several other investigations in the field of job stress have highlighted the moderating effect of one or the other source of social support (Brown and Harris,1978; Eaton, 1978; Pines and Kafry, 1981; Kessler and Essex, 1982;

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Turner, 1983; Seers et al., 1983; Cohen and Wills, 1985; Fenlason and Beehr, 1994; Srivastava, 1998; Viller and Sommerville, 2000; Beehr and Glazer, 2001; Glazer and Bell, 2003).

Thus, the moderating effects of social support revealed in the present study are largely in agreement with previous findings. The obtained results in this section have affirmed the moderating effects of different sources of social support on the stress- strain relationship. The three sources of social support, are found to have highly significant moderating effects in the case of all the job related strains. The present results indicate the need for social support in the work environment as well as the relevance of appropriate coping styles.

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