STRESS, SOCIAL SUPPORT, AND BURNOUT IN NURSES[#]

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This study investigates the relationship between Home-work stress, burnout, and the role of extra- and intra-organizationl sources of social support in reducing that stress and buffering its impact on burnout. Data were collected from public hospital nurses and analyzed using regression techniques. Results indicated that different sources of social support relieve the strain of home-work stress. Some evidence of stress-moderating role of social support was also found. Results also suggested that married nurses (having children) were particularly vulnerable to home-work stress. Implications of this research are discussed for programmes aimed at preventing nurses burnout.

Burnout is a three-dimensional syndrome of emotional exhaustion (feelings of being emotionally overextended and exhausted by one's work), depersonalization of others (unfeeling and impersonal responses towards the recipients of one's care), and perceptions of reduced personal accomplishment (low feelings of competency and successful achievement in one's work) resulting from intense involvement with people in a caregiving environment (Garden, 1989; Maslach & Jackson, 1986). Burnout is considered to be a response to the chronic stress of dealing with other people, particularly when they are troubled or having problems. Caring for others and care-giving work environment are generally considered to be the primary causes of burnout syndrome.

Burnout has been linked to reduced organizational efficiency and work related problems such as turnover, low morale, poor quality of care, absenteeism, and interpersonal problems (Jackson & Maslach, 1982; Muchinsky, 1987; Turnipseed, 1988). Problems with a personal basis linked to burnout include insomnia, perceptions of physical exhaustion, and alcohol abuse, which may also affect job performance

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(Maslach, 1981, 1982; Pines & Aronson, 1981). These cognitive, behavioral, and physiological results of burnout may influence the effectiveness of the organization as burned-out individuals experience chronic fatigue, weariness, depression, and feelings of hopelessness. Other detrimental results include the development of negative attitudes toward self, work, and others, and feelings of unsuccessful work performance (Pines & Aronson, 1981), along with general dissatisfaction with work accomplishment (Maslach & Jackson, 1986). The negative consequences of burnout will likely have a spill-over effect on family and peer relations, which may further influence job performance (Pines & Aronson, 1981).

Human service workers appear to be especially vulnerable to burnout because of the nature of their work (Maslach, 1981; Pines, Aronson, & Kafry, 1981). Nurses, as one of the human service workers, are considered to be particularly susceptible to burnout because their jobs are stressful and emotionally demanding. According to Hingley (1984) "nursing is, by its very nature, an occupation subject to a high degree of stress. Everyday the nurse confronts stark sufferings, grief, and death as few other people do. Many nursing tasks are mundane and unrewarding. Many are, by normal standards, distasteful, even disgusting, others often degrading; some are simply frightening" (p.10). Although the women drawn to human service professions often characterized as being nurturing, empathic, and sensitive to others. But when they have to balance home and work, they often find they give to everyone but themselves (Maslach, 1982). Nurses who are combining the careers of a home maker and a professional, they have to balance home and work, because women who work outside the home often add more duties and responsibilities, and they have to deal with demands of job and family i.e., they have to integrate personal and professional life which is really monstrous for them. When there is an incompatibility of demands between one's home and work roles, the result is some degree of home-work stress (Greenhaus & Beutell, 1985). As a result, the same characteristics that make her an assest to her family and her profession also make her a likely candidate for burnout. Thus burnout is a particularly relevant variable to consider when examining home-work stress in human service organizations.

Social support, one of the most widely studied social phenomena for the last two and the half decades, has been identified as a resource that reduce or eliminates negative effects of stress. The dominant social support hypothesis has been that it buffers the impact of stressors on manifestations of strain. Empirical evidence regarding moderating

hypothesis is mixed. However, researchers have consistently found that individuals who possess high levels of social support are in better physical and mental health. As we are considering the home-work stress, a stressor that crosses the organizational boundaries, we believe it is useful to consider both the intraorganizational and extraorganizational sources of support in reducing the impact of home-work stress and buffering its impact on job burnout.

In case of intraorganizational stressor both the supervisor and coworkers. (intraorganizational support), are in optimal positions to provide support because of their understanding of the stressors inherent in the workplace. However, intraorganizational support in case of extraorganizational stressor is less clear. It is possible that supervisors and coworkers could relieve home-work stress by sharing information and resources, offering suggestions and helping workers realize that they are not alone (Ray & Miller, 1994). Different researches has found that extraorganizational support (e.g., family and friends) can have positive effects on a wide range of physical and psychological outcomes (Albrecht & Adelman, 1987). However, interactional links may be stressful as well as supportive (Shinn, Lehmann, & Wong, 1984). As far as direct and buffering effect of social support is concerned, Cohen and Wills (1985) have investigated the distinction between direct and buffering effects of social support.

In our investigation of home-work stress, burnout, and social support, three types of effects are possible. First, the social support could have a direct effect on the stressor (home-work stress). Second, the social support could have a direct effect on burnout. Third, social support could serve a buffering role in which social support is related to burnout differentially for individuals under different levels of stress.

In the present research, the researchers have tried to focus on what demographic factors affect perceptions of home-work stress and burnout, and whether different sources of intraorganizational and extraorganizational support are differentially effective in reducing the home-work stress and burnout or buffering the stress-burnout relationship for home-work stress.

METHOD

Subject

The data were collected from 74 nurses that were approached individually by the second author. All the respondents were female and worked full time in the two large-sized public hospital of metropolitan

city of Lahore, Pakistan. Average age was 33 years $(SD=5.58)$, and average job experience was 9.34 years $(SD=4.66)$. 51% percent were married. For those with children, the average number was 3.11 $(SD=.99$, range 1-5).

Instruments

Home-work Stress

The stress created by having to balance home and work demands was measured by 4 items scale, developed by Ray and Miller (1994). The scale was scored on 5-point rating scale, ranging from 1 (never) to 5 (always). Alpha coefficient of .94 have been found for this scale.

Maslach Burnout Inventory

Burnout was assessed by 22 items Maslach Burnout Inventory (MBI: Maslach & Jackson, 1986). It consists of three subscales: Emotional Exhaustion (9 items, characterized by a "loss of feeling and concern, a loss of trust, a loss of interest, a lost of spirit". Depersonalization (5 items), characterized by "negative shift overtime in response to others"; and a sense of reduced Personal Accomplishment (8 items), characterized by a "loss of sense of efficacy on the job". The scale was scored on 7-point scale, ranging from 0 (never) to 6 (always). Maslach and Jackson (1986) reported that the response formats of intensity and frequency are highly correlated. On the basis of their recommendation, we used only the frequency format for measuring burnout. Alpha coefficient ranging from .79 to .95 have been found for the three subscales.

Social Support

Perceptions of support from five sources (supervisor, coworkers, family, friends, and adminstration) were measured. The items developed by Caplan, Cobb, French, Harrison, and Pinneau (1975) were used for all the five sources of support. Each subscale consists of four to six 5-point Likert-scaled items. Alpha reliability coefficient ranging from .96 to .98 have been found for five subscales, which showed that this measure is quite reliable.

Demographics

It included education, age, experience or job tenure, marital status, and the number of children.

RESULTS

Analysis of the data focused on several different issues. First, the effect of various demographic variables on Home-work Stress and Burnout were evaluated. A final set of analyses examined the relation between Home-work stress, Social Support, and Burnout.

The means, standard deviations, alpha reliabilities, and intercorrelation of all study variables are listed in Table 1.

The first research question regarding the influence of demographic variables on Home-work stress, burnout and various dimension of burnout was tested through simple correlation and analysis of variance.

Five demographic variables, three of them related to respondent's job (i.e., age, education, and experience) and two related to home life (i.e., marital status and the number of children) were considered. Analyses indicated that two of the demographic variables related to respondent's job had no significant impact on perceptions of Home-work stress. Only age was found to be significantly related to personal accomplishment dimension of burnout ($F=4.33$, $df=1,72$, $p<.04$). Out of two demographic variables related to home life, marital status was significantly related to perceptions of Home-work stress ($F=11.08$, $df=1, 72$, $p<.001$). The mean of perceived stress for mothers was 13.16 and the mean for non-mothers respondents was 10.28 (scale ranged from 4-20). Respondents who were married and mothers perceived significantly more Home-work stress than unmarried (non mothers). The marital status was also significantly related to burnout ($F=47.85$, $df=1, 72$, $p<.001$). The mean on burnout for married was 72.61 and for unmarried the mean was 47.05 (scale ranged from 0-132). The marital status was also significantly related to the emotional exhaustion, depersonalization and personal accomplishment dimensions of burnout. However, the variable "number of children" had no significant impact on perceptions of home-work stress and burnout.

The next set of analyses examined the relation between Home-work stress, social support, and burnout among nurses, as the second research question asked if different sources of support were differentially related to burnout (direct effect) or differentially effective in buffering the relationship between stressors and burnout (interaction effect), was tested through regression analysis. To investigate direct effects for support and stress on burnout, separate regression equations were run for each sub-dimensions of burnout. Finally, in order to test for interactions between the stress and social support measures in predicting burnout, multiplicative interaction terms were formed between sources

Table 1

Descriptive statistics and intercorrelations of all variables.

Variables	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
I. Age	-											
II. Job Experience	.92***	-										
III. Supervisor Support	-.01	-.02	(.98)									
IV. Co-worker Support	-.07	-.14	.59***	(.97)								
V. Family Support	.11	.13	.58***	.63***	(.97)							
VI. Friend Support	.11	.09	.55***	.73***	.84***	(.96)						
VII. Administrative Support	-.06	-.07	.41***	.62***	.56***	.70***	(.98)					
VIII. Home-Work Stress	.03	.12	-.47***	-.40***	-.25*	-.36**	-.36**	(.94)				
IX. Emotional Exhaustion	.16	.21	-.39***	-.22*	-.14	-.22*	-.43***	.65***	(.95)			
X. Depersonalization	.14	.22	-.40***	-.23*	-.09	-.19	-.32**	.64***	.93***	(.87)		
XI. Personal Accomplishment	-.21	-.23	.50***	.55***	.33**	.45***	.52***	-.45***	-.50***	-.56***	(.76)	
XII. Burnout	.09	.14	-.24*	-.02	.07	-.05	-.23*	.57***	.93***	.87***	-.16	(.83)
M	33.42	9.34	18.50	19.84	14.03	13.26	14.50	11.76	28.31	13.68	18.19	60.18
SD	5.58	4.66	6.86	5.88	4.13	3.87	6.42	3.97	15.95	8.11	9.17	20.35

Note: Parenthetical values on diagonals are coefficient alpha reliability estimates from the present sample; $N = 74$

$*p < .05$; $**p < .01$; $***p < .001$

of support and stress, and used in a series of regression equations to test whether any interaction terms were significant in over-riding the main effects. The main effects for stress and social support are presented in Table 2.

Table 2

Summary of main effect regression results

Dependent Variables	Independent Variables	β	p
Emotional Exhaustion	Home-Work Stress	.588	.000
(Multiple $R = 735$, $R^2 = .540$)	Supervisor Support	-.227	.053
	Coworker Support	.225	.093
	Family Support	.115	.470
	Friend Support	.148	.432
	Administrative Support	-.441	.000
Depersonalization	Home-Work Stress	.552	.000
(Multiple $R = .701$, $R^2 = .540$)	Supervisor Support	-.279	.024
	Coworker Support	.131	.348
	Family Support	.216	.201
	Friend Support	.072	.712
	Administrative Support	-.263	.040
Reduced Personal	Home-Work Stress	-.163	.135
Accomplishment	Supervisor Support	.241	.062
(Multiple $R = .662$, $R^2 = .439$)	Coworker Support	.287	.053
	Family Support	-.215	.225
	Friend Support	.025	.902
	Administrative Support	.283	.036

As Table 2 indicates, a strong main effect on burnout was observed for Home-work stress ($\beta = .558$), and administrative support ($\beta = -.441$) and a weaker significant relationship were found for supervisory support ($\beta = -.277$). It shows that decreased level of supervisory and administrative support were associated with increased levels of emotional exhaustion dimension of burnout. Supervisory support was also found to interact with Home - work stress in predicting emotional exhaustion, ($R^2 = .480$, $\beta = .773$, $p = .013$). A significant interaction effect was also observed between home-work stress and coworkers support ($R^2 = .472$, $\beta = .848$, $p = .014$) in predicting the emotional exhaustion dimension of burnout. The pattern of results associated with

this interaction term were consistent with the buffering hypothesis. As the level of supervisory support and coworkers support increased, the strength of the relation between home-work stress and feelings of emotional exhaustion decreased.

As indicated in Table 2, a significant direct effects were found for Home-work stress ($\beta=$ .552), supervisory support ($\beta=$ -.279), and administrative support ($\beta=$ -.263). Thus as would be predicted, high levels of depersonalization of nurses were associated with high levels of Home-work stress and low levels of supervisory and administrative support. Supervisory support was also found to interact with home-work stress in predicting depersonalization ($R^2 =$ .477, $\beta=$ .776, $p=$ .013). As the level of supervisory support increased, the strength of the relation between home-work stress and feelings of depersonalization decreased. Table 2 also shows a significant direct relationship for administrative support ($\beta=$ .283) and co-workers support ($\beta=$ .287), such that high levels of administrative and co-workers support were associated with high levels of personal accomplishment. In addition to these main effects, a significant interaction effect was also observed between Home-work stress and supervisory support ($R^2 =$ .353, $\beta=$ -.797, $p=$ .021), and coworker support ($R^2 =$ .413, $\beta=$ -.833, $p=$ .022) in predicting the reduced personal accomplishment dimension of burnout.

DISCUSSION

The purpose of the study was to investigate the relationship between home work stress and burnout, and the affect of various demographic variables on the perceptions of stress as a result of home-stress conflict, and also to determine whether different sources of intraorganizational and extraorganizational support moderate the home-work stress and burnout relationship.

The results of the present study suggests that the marital status was significantly related to home-work stress and not the number of children i.e., married respondents, all mothers, perceived significantly more home-work stress as compared to non mothers. Same is the case for burnout and its three dimensions also. The findings indicates that simply having children is stressful, and not the number of children. These findings agrees with the results of a study among nurses that simply having children is stressful, but neither the number of children nor the percentage of responsibility for their care (Ray & Miller, 1994). Previous research does suggest that the age of the children makes a

difference, with mothers of preschoolers reporting more role-related strain (Kelly & Voydanoff, 1985) and more spillover between home and work than did mothers of older children (Crouter, 1984). Another finding was that the age was found to be significantly related to personal accomplishment dimension of burnout, with younger nurses indicating they had experienced a greater sense of personal accomplishment. A satisfactory explanation for this difference in the levels of personal accomplishment may be, that the younger nurses are more energetic, ambitious, motivated, and smart having the perceptions of personal growth opportunities.

The importance of social support with respect to stress is widely acknowledged in the existing literature. The influence of administrative support was seen in the form of direct effects, while that of supervisory and coworker support was seen in the form of direct as well as buffering effect in reducing the stress-burnout relationship. Thus these results suggests that relationship at the workplace i.e., intraorganizational support, play a major role in assisting nurses in dealing with stress-burnout relationship, while the non-work place relationship i.e., extraorganizational support does not play any significant role in reducing the stress-burnout relationship. These findings also suggests the general value of intraorganizational support for all nurses, regardless of levels of stress. It appears that training and interventions tactics designed to increase intraorganizational support may result in lower levels of intensity of experienced burnout and should be encouraged. Overall, the pattern of results in the present study suggests that the married nurses are more vulnerable to home-work stress. This study also suggests that the intraorganizational support play a significant role in reducing the stress burnout relationship.

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