

Predictors of Job Satisfaction, Turnover, and Burnout in Female and Male Jordanian Nurses

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En raison des importants changements qui ont lieu au sein des systèmes de santé, le phénomène de la satisfaction professionnelle, du roulement de personnel et de l'épuisement professionnel chez les infirmières et infirmiers constitue un sujet d'intérêt pour les communautés infirmières partout dans le monde. Cette recherche avait pour objectif d'examiner ces phénomènes au sein d'une population infirmière jordanienne, constituée de 25 % d'hommes. Cette étude descriptive corrélative a été menée auprès d'un échantillonnage de 479 infirmières et infirmiers (68 % de femmes, 32 % d'hommes) travaillant dans des hôpitaux publics et militaires en Jordanie, ce nombre constituant un taux de réponse à une enquête de 77 %. Des différences importantes ont été relevées entre les hommes et les femmes concernant certains aspects mesurés, mais tel n'était pas le cas quant au roulement de personnel et à l'épuisement professionnel. Toutefois, des analyses de régression ont démontré que des variables exerçaient des influences différentes sur les hommes et les femmes en ce qui a trait aux 3 indicateurs de résultats. Les conséquences en regard de l'exercice de la profession en Jordanie font l'objet d'une discussion.

As health-care systems undergo significant changes, the phenomena of job satisfaction, turnover, and burnout in nurses are of interest to nursing communities throughout the world. The purpose of this research was to examine these phenomena in a population of Jordanian nurses that is constituted of 25% men. This descriptive correlational study involved a sample of 479 nurses (68% female, 32% male) employed in public and military hospitals in Jordan, representing a 77% response rate to a survey. Significant differences were found between men and women for some of the items measured but not for turnover or burnout. However, regression analyses did demonstrate that selected variables impacted differently on men and women for the 3 outcome measures. Implications for nursing in Jordan are discussed.

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In the past decade Jordan has witnessed tremendous improvement in women's education and health status, and increasing numbers of Jordanian women are remaining in the workforce after they marry (Department of Statistics, 1998). The majority of these women work in the education sector (54%), followed by the health and social services sector (15%). However, Jordanian women who enter the workforce have many demands and responsibilities placed on them, as they are expected to fill multiple roles. Married women in the workforce are often also mothers and housekeepers, and must assume full responsibility for child care. These factors often contribute to the stress they experience in their lives. Also, many women quit their jobs in order to marry and have children, thus contributing to high turnover rates in professions such as nursing.

The total number of nurses in Jordan is estimated at more than 6,000. They graduate from either a 4-year nursing baccalaureate program or a 3-year diploma program (Ministry of Health, 1998). Gender imbalance in nursing is not as significant a problem in Jordan as it is in many other countries. The last 10 years have seen a dramatic increase in the number of male nurses entering the profession, and male nurses now constitute approximately 25% of nurses in the country. However, nursing is still perceived as women's work (Al-Ma'aitah, Rajacich, & Khasawneh, 1995; Fagin & Maraldo, 1988). As the proportion of male nurses in Jordan has increased, male/female issues in the profession have become an important topic requiring further study (Al-Ma'aitah et al.).

Currently, Jordan is facing a severe shortage of qualified nurses, and this contributes to low standards of nursing care. Furthermore, due to shortages of other qualified support staff in the health sector, such as nursing assistants and paramedics, nurses are spending more time on non-nursing functions. Nurses have been moving from hospitals to other points of delivery in the health-care sector in Jordan and to other countries in the Gulf region, thus contributing to a nursing deficit in the hospital sector. In addition, nurses who are unwilling to do shift work, or who prefer to do light work, usually move to Public Health Centres, thus also contributing to this deficit. It is readily apparent that nurses in the hospital sector are faced with many critical and challenging issues.

Literature Review

Dissatisfaction with hospital jobs is frequently cited as an explanation for job turnover in nursing (Blegen & Mueller, 1987; Curry, Wakefield,

Price, Mueller, & McCloskey, 1985). Jones (1990) reports that job turnover itself is costly and that it causes unstable staff complements and contributes to increased dissatisfaction among the remaining employees. Using a causal modelling approach to test job satisfaction in nursing, Blegen and Mueller found that predictors included opportunities for promotion, perceived fair rewards for work done, reasonable workload, and family responsibilities and stressors.

In a meta-analytic study, Irvine and Evans (1995) investigated causal relationships among job satisfaction, behavioural intentions, and nurse turnover behaviour. They found that job characteristics such as routinization, autonomy, and role conflict, and characteristics of the work environment such as supervisory relations, leadership, and stress were all related to job satisfaction. They found that work content and work environment variables had a stronger relationship with job satisfaction than economic or individual difference variables, and they found a negative relationship between job satisfaction and turnover. In a review of factors influencing turnover and absence, Borda and Norman (1997) also found that job satisfaction was positively related to remaining in the position and inversely related to absence from work.

In an extensive review of the literature on recruiting and retaining men in nursing, Villeneuve (1994) concluded that men like nursing and that nursing is appropriate work for both men and women. Villeneuve writes that male nurses' reasons for choosing certain clinical or technical areas "may be related to anticipated role strain, but it also may reflect their genuine gender-related interests, career orientation, and perception of autonomy" (p. 225). In a survey of male nurses, Cyr (1992) found that more men are now viewing nursing as a career rather than as a job.

It appears that some Jordanian studies support North American findings regarding issues of nursing worklife. Al-Ma'aitah (1989) examined the role of psychosocial factors in the decision of Jordanian baccalaureate nurses to remain in or leave the profession. These factors were: personal beliefs about having a good position, satisfaction with communicating with people, feeling confident, having more time for their own goals and plans, having more time for social life, feeling fulfilled, and being burdened with responsibilities.

Ahmad, Saleem, Shankary, and Safady (1994) studied psychological stressors among nurses working in critical care at Jordan's King Hussein Medical Center. They found no differences between the ratings of female and male nurses for severity of stressors and depression, but they did find significant differences in the ratings for anxiety.

ICU/CCU female nurses were found to be more anxious than their male colleagues, but no difference was found between female and male nurses working in medical/surgical or hemodialysis units. Armstrong-Stassen, Al-Ma'aitah, Cameron, and Horsburgh (1994), in a study with Canadian and Jordanian nurses, found that type of work, amount of work, and career future were important determinants of burnout. They also found that satisfaction with career opportunities and burnout were associated with intention to leave (turnover) for both groups.

The purpose of the present study was to identify factors that affect job satisfaction, burnout, and turnover relative to the quality of work-life for female and male staff nurses in hospital units in Jordan. The research question was: *Among male and female nurses, what personal characteristics, structural characteristics (job status and unit type), job-enhancing and job-limiting characteristics, and organizational characteristics are the best predictors of (a) job satisfaction, (b) propensity to leave, and (c) burnout?*

Conceptual Framework

The Person-Environment Fit Model (PE Fit Model) (French, Caplan, & Van Harrison, 1982) provided a framework for conceptualizing nurses' satisfaction with worklife. The model views "workers" as characterized by abilities and needs, and "work environments" as characterized by supplies and demands. "Goodness of fit" occurs when nurses' needs are congruent with environmental supplies and when nurses' abilities are congruent with environmental demands. In this study it is proposed that a good fit between nurses' perceived abilities/needs and work supplies/demands will lead to greater job satisfaction, less turnover, and less burnout.

Measures

Demographic variables comprised age, marital status, number of children, nursing education, work experience (length of time employed as a staff nurse in a hospital setting), type of nursing unit, and socio-economic status (Hollingshead, 1975).

Work Environment Measures

The Quality of Worklife Conditions (QWL-C) (Sashkin & Lengermann, 1987) measures satisfaction with conditions of work. Internal consis-

tency of the total score was supported (Cronbach's alpha, .67) in this study. However, internal consistency scores of the instrument subscales were unsatisfactory and were discarded in favour of two nine-item subscales derived by using Principle Factor Analysis with a varimax, orthogonal rotation.

The first subscale, conceptualized as job-limiting characteristics, included nurses' perceptions of repetition, speed, and coordination of work tasks, with decision-making and problem-resolution referred to their superiors in the nursing management hierarchy. The second subscale, job-enhancing characteristics, included perceptions of autonomy and control in decision-making and problem-solving, and pressures and opportunities to learn in the context of nursing work. The Cronbach's alphas for these new subscales were .58 and .53, respectively.

The Index of Organizational Reactions (IOR) (Smith, 1976), consisting of 42 items, focused on employee satisfaction with eight specific aspects of their job and current work environment: supervision, hospital identification, kind of work, amount of work, co-workers, physical conditions, financial rewards, and career future. Alpha reliability for subscales ranged from .75 to .91.

Outcome Measures

The Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967) was used as a global measure of job satisfaction. The MSQ consists of 20 items, ranging from very dissatisfied (1) to very satisfied (5) (Cronbach's alpha, .86). The Propensity to Leave instrument (Lyons, 1971) was used to measure the likelihood of the nurses leaving their current job (turnover). A Cronbach's alpha of .85 supported the internal consistency of this three-item scale. These measures continue to be used extensively in worklife research and have well-established reliability and validity (Borda & Norman, 1997; Young, 1991).

The Burnout Scale (adapted from Maslach & Jackson, 1981), consisting of 16 items and designed to measure the burnout syndrome in human services professionals, provides three subscales: emotional exhaustion (7 items), depersonalization (4 items), and lack of personal accomplishment (5 items) (Cronbach's alpha of .78 in this study). This measure has satisfactory reliability and validity with a variety of employee populations (Maslach & Jackson).

Method

Sample

The sample consisted of 479 registered nurses. Female nurses accounted for 68% of the sample ($n = 327$), males 32% ($n = 152$). For female nurses, the mean age was 27.39 years ($SD = 5.54$), they had worked as a nurse for $M = 5$ years ($SD = 4.8$), and 50% were married. For male nurses, the mean age was 27.82 years ($SD = 5.12$), they had worked as a nurse for $M = 4.5$ years ($SD = 4.5$), and 57% were married. There were no significant differences between women and men for years of nursing experience, socio-economic status, or family stress. Significantly more male than female nurses were married. A higher proportion of men (47%) than women (33%) had a baccalaureate education.

Procedure

The measures were translated into Arabic and then back translated to ensure accuracy of wording and meaning of the items. In addition, they were reviewed by nursing experts in Jordan to ensure cultural appropriateness, and had been used previously with Jordanian populations (Armstrong-Stassen, Al-Ma'aitah, Cameron, & Horsburgh, 1994, 1998). The questionnaire, accompanied by a letter outlining the purpose of the study and assuring confidentiality and anonymity, was distributed to registered nurses employed in public and military hospitals in Jordan. The nurses were requested to complete the questionnaire and the demographic data sheet that were distributed and collected personally by the investigators. Return of the completed questionnaire constituted consent. The response rate was 77%.

Results

Comparisons of work environment and outcome variables for Jordanian nurses by gender are shown in Table 1.

Analysis of variance indicated significant differences between women and men for job-enhancing characteristics ($F = 4.2, p < .05$), kind of work ($F = 12.2, p < .001$), general satisfaction (MSQ) ($F = 5.2, p < .05$), and intrinsic satisfaction ($F = 9.1, p < .01$). Female nurses perceived higher job-enhancing characteristics and satisfaction with the kind of work they were doing. Female nurses were marginally more satisfied with their financial rewards ($F = 3.6, p < .06$) and their career future ($F = 7.2, p < .06$). Female nurses reported significantly higher general satisfaction and intrinsic satisfaction. On the outcome measures of

Table 1 ANOVA Gender Comparisons of Work Environment and Outcome Variables for Jordanian Nurses

Work Environment and Outcome Variables	Range	Female (n = 327)		Male (n = 152)		F
		M	SD	M	SD	
Quality of Worklife – Conditions						
Job-Limiting Characteristics	3–33	18.4	(3.8)	18.5	(3.8)	0.1
Job-Enhancing Characteristics	2–34	22.1	(3.9)	21.3	(4.2)	4.2*
Index of Organizational Reactions						
Supervision	6–30	18.2	(5.1)	17.6	(5.6)	1.7
Hospital Identification	5–25	13.4	(4.1)	12.8	(4.2)	1.7
Kind of Work	6–30	21.0	(5.3)	19.2	(5.5)	12.2**
Amount of Work	4–20	11.5	(3.7)	10.9	(3.4)	3.3
Co-workers	5–25	16.2	(4.2)	16.5	(3.7)	0.2
Physical Work Conditions	5–25	19.4	(5.8)	19.0	(6.1)	0.6
Financial Rewards	5–25	13.0	(3.7)	12.3	(3.8)	3.6+
Career Future	5–25	14.6	(4.7)	13.4	(4.8)	7.2+
Minnesota Satisfaction Questionnaire						
Intrinsic Satisfaction	12–60	41.1	(7.6)	38.9	(7.0)	9.1**
Extrinsic Satisfaction	6–30	17.1	(5.1)	16.4	(4.6)	2.3
General Satisfaction	20–100	54.0	(12.8)	61.2	(11.1)	5.2*
Propensity to Leave	3–15	8.9	(3.3)	9.2	(3.3)	0.9
Burnout Scale						
Emotional Exhaustion	7–28	16.8	(4.5)	16.8	(4.6)	0.0
Depersonalization	4–16	6.1	(2.5)	6.5	(2.8)	2.4
Lack of Personal Accomplishment	5–20	10.2	(2.7)	10.5	(3.1)	1.9

+ $p < .06$ * $p < .05$ ** $p < .001$

propensity to leave and of burnout, there were no significant differences between female and male nurses.

In order to examine predictors of job satisfaction, turnover, and burnout, multiple regression (MR) analyses were conducted separately for female and male nurses. Separate hierarchical MR equations were generated for the outcome variables Minnesota Satisfaction Questionnaire, Propensity to Leave, and Burnout. In each equation, the independent or predictor variables were entered in an order that reflected the framework: (1) personal characteristics were entered first as control variables, followed by (2) structural work characteristics such as job status and type of unit, (3) satisfaction with job characteristics (enhancing and limiting), and (4) satisfaction with organizational characteristics as measured on the IOR.

The first hierarchical MR equation examined the relative influence of the predictor variables on female and male nurses' responses on the Minnesota Satisfaction Questionnaire (Table 2).

The model for women explained 43% of the variance; job-enhancing characteristics, satisfaction with supervision, and career future were significant predictors of job satisfaction. The model for males explained 60% of the variance; satisfaction with supervision and career future contributed significantly to overall job satisfaction.

The second hierarchical MR equation investigated the relative contribution of the independent variables to the nurses' propensity to leave their jobs (Table 3). The models explained 50% of the variance in female and male nurses' propensity to leave. Women who were least satisfied with the kind of work they did, their physical work conditions, and their career future were more likely to consider leaving their job. Men who identified less strongly with their hospital of employment and who perceived lack of satisfaction with their career future were more likely to want to leave.

The hierarchical MR model using the outcome variable of burnout is presented in Table 4. Female nurses who reported more family stress; less job-enhancing characteristics; and less satisfaction with kind of work, co-workers, and career future reported greater feelings of burnout. For male nurses, the only significant predictor of burnout was kind of work; lowered satisfaction with the kind of work they were required to perform was significantly related to their reported burnout. The model for female nurses explained 30% of variance in burnout scores. The model for male nurses explained 23% of variance in burnout scores.

Table 2 Hierarchical Regression Results for Jordanian Female and Male R.N.s
(Dependent Variable – Minnesota Satisfaction Questionnaire, General Satisfaction)

Variables	Female			Male		
	Beta ^a	F	R ² Change	Beta ^a	F	R ² Change
Personal Characteristics						
Years as Nurse	-.04	.60		.11	2.87	
Socio-economic Status	.00	.00		-.11	3.22	
Family Stress	.07	1.77	.00	.01	.02	.09*
Structural Characteristics						
Job Status (FT/PT)	.04	.51		.08	1.55	
Medical/Surgical Unit	-.01	.03		.01	.01	
Intensive Care Unit	.01	.02		.00	.00	
Operating Room	.03	.21	.01	-.05	.59	.03
Job Characteristics						
Job-Limiting Characteristics	.03	.35		.04	.36	
Job-Enhancing Characteristics	.12	5.42*	.11***	.15	3.60	.26**
Organizational Characteristics						
Supervision	.22	9.54**		.38	19.04***	
Hospital Identification	.02	.05		.04	.22	
Amount of Work	.05	.55		.02	.04	
Kind of Work	.07	1.16		.05	.21	
Physical Work Conditions	.03	.26		-.01	.01	
Financial Rewards	.02	.10		.01	.01	
Co-workers	.03	.26		-.00	.00	
Career Future	.37	28.47***	.35***	.33	14.27**	.29**
			Adjusted R ² = .43	Adjusted R ² = .60		
* $p < .05$ ** $p < .01$ *** $p < .001$ ^a Beta coefficients are from the regression equation with all variables entered.						

Table 3 Hierarchical Regression Results for Jordanian Female and Male R.N.s
(Dependent Variable – Propensity to Leave)

Variables	Female			Male		
	Beta ^a	F	R ² Change	Beta ^a	F	R ² Change
Personal Characteristics						
Years as Nurse	.00	.00		-.12	2.45	
Socio-economic Status	.04	.79		.04	.37	
Family Stress	.06	1.61	.03	-.10	1.63	.12**
Structural Characteristics						
Job Status (FT/PT)	-.04	.66		.05	.50	
Medical/Surgical Unit	.06	.95		.14	2.42	
Intensive Care Unit	.05	.78		.07	.60	
Operating Room	-.04	.43	.04	.11	2.04	.04
Job Characteristics						
Job-Limiting Characteristics	-.04	.56		-.05	.44	
Job-Enhancing Characteristics	-.06	1.38	.06**	.05	.32	.10**
Organizational Characteristics						
Supervision	-.06	.84		-.16	2.70	
Hospital Identification	.04	.31		-.22	4.96*	
Amount of Work	.07	1.20		-.03	.14	
Kind of Work	-.15	6.40*		-.03	.08	
Physical Work Conditions	-.24	14.19**		-.06	.51	
Financial Rewards	-.08	1.74		-.10	1.46	
Co-workers	.02	.14		.09	.96	
Career Future	-.44	44.64**	.40**	-.37	14.04***	.33***
			Adjusted R ² = .50			
			Adjusted R ² = .50			

* $p < .05$ ** $p < .01$ *** $p < .001$ ^aBeta coefficients are from the regression equation with all variables entered.

Table 4 Hierarchical Regression Results for Jordanian Female and Male R.N.s
(Dependent Variable – Burnout Questionnaire)

Variables	Female			Male		
	Beta ^a	F	R ² Change	Beta ^a	F	R ² Change
Personal Characteristics						
Years as Nurse	-.05	.76		-.06	.34	
Socio-economic Status	.05	.65		.05	.34	
Family Stress	.13	4.79*	.05**	.06	.34	.04
Structural Characteristics						
Job Status (FT/PT)	.04	.46		.06	.38	
Medical/Surgical Unit	.05	.41		.06	.24	
Intensive Care Unit	-.04	.36		.04	.11	
Operating Room	-.03	.17	.02	-.06	.45	.03
Job Characteristics						
Job-Limiting Characteristics	.01	.06		-.03	.10	
Job-Enhancing Characteristics	-.18	9.00**	.09***	-.10	.76	.06*
Organizational Characteristics						
Supervision	.04	.30		.07	.34	
Hospital Identification	-.01	.00		-.02	.04	
Amount of Work	-.10	1.86		-.19	2.77	
Kind of Work	-.18	6.29*		-.36	6.28*	
Physical Work Conditions	-.09	1.47		.17	2.42	
Financial Rewards	.09	1.49		-.08	.71	
Co-workers	-.15	4.66*		-.12	1.25	
Career Future	-.18	5.14*	.18***	-.19	2.33	.22**
			Adjusted R ² = .30			Adjusted R ² = .23

* $p < .05$ ** $p < .01$ *** $p < .001$ ^aBeta coefficients are from the regression equation with all variables entered.

Discussion

Overall, female nurses in Jordan expressed more satisfaction with their jobs than male nurses. This may be because, in Jordan, nursing continues to be perceived as a female profession and women continue to find it easier than men to obtain employment. Also, female nurses currently hold most of the nursing management positions in Jordan and are more likely to hire women than men in their institutions. Regrettably, this practice is endorsed and even encouraged by physicians and upper levels of management in health-care organizations. However, a recent study by Al-Ma'aitah et al. (1995) on the interpersonal behaviour of Jordanian nursing students showed that male students tend to control and influence interpersonal relationships more than female students. This may result in more male nurses pursuing leadership positions in the future.

It was apparent in all the regression models that satisfaction with job characteristics and organizational characteristics had the most significant impact on all the outcome variables in this study. This lends support to the findings of Irvine and Evans (1995) on the importance of these factors on quality of worklife. It also supports the conceptual model that when nurses (workers) experience a good fit between their needs and their work supplies/demands they report greater job satisfaction and lower levels of turnover and burnout.

Job-enhancing characteristics was a significant predictor of job satisfaction and burnout in female but not male nurses. Female nurses reported fewer opportunities for autonomy, decision-making, and personal growth. These findings may also reflect the powerlessness of Jordanian nurses. Powerlessness has been reported as an important contributor to burnout (Kean, Ducette, & Adler, 1985), while autonomy has been found to be a key contributor to job satisfaction (McCloskey, 1990).

Lack of satisfaction with supervision received was a significant predictor of job satisfaction in both women and men. Because of limited opportunities for staff development and further education, many supervisors are promoted on the basis of length of service. These results indicate that nurses in supervisory positions should be offered more opportunities to develop their management skills. There is a wide gap between nursing knowledge and practice and between administrators and nurses in Jordanian hospitals. Nurses in the higher hospital positions tend to be less well educated and to have been trained on a disease-focused model. This supervisory issue, which was immediately

apparent in this investigation, affects job satisfaction for both female and male nurses. In their literature review, Frisina, Murray, and Aird (1988) suggest that the factor of respect and recognition plays a greater role in job satisfaction than pay, workload, and so on. It can also be readily supplied by an astute and well-prepared supervisor.

Both female and male nurses expressed concerns about their career future, a powerful predictor of job satisfaction and propensity to leave. This supports the findings of other investigations that opportunities for promotion and career advancement are important predictors of job satisfaction (Blegen & Mueller, 1987; Frisina et al., 1988). In Jordan there is no clinical ladder for employment advancement, and for the most part the baccalaureate nurse shares equal status with the diploma-prepared nurse. This is an issue that requires careful review and evaluation, as Al-Ma'aitah (1989) also found that Jordanian baccalaureate nurses working in hospitals were more likely to choose to leave nursing than those practising in other settings.

For male nurses, lack of satisfaction with their hospital of employment was a significant predictor of propensity to leave — that is, nurses who felt no loyalty towards their hospital (hospital identification) of employment (i.e., felt that it treated its employees poorly, was a poor place to work, and discouraged them from doing their best) were more likely to leave. Retaining men in the profession will require attention to men/employer relations now and in the future.

Physical work conditions and kind of work performed were significant predictors of turnover among the female nurses, who were more likely to consider leaving if their physical work conditions were unpleasant and if they were dissatisfied with the kind of work they were required to perform. Type of work was a significant predictor of burnout for both men and women. In Jordan, nursing practice is not controlled by a nursing association. Each institution sets its own policies on the role and practice of nursing, and it may change these policies at any time to meet its own needs. Because such changes are ordered at the highest levels, nurses at the bedside have limited opportunity to influence the kind of work they are required to perform.

In view of the lack of clarity and consensus on the role of nurses, the many levels of nursing, and the negative image of nursing, we would support the recommendations of Khalaf (1994), that hospital administrators in Jordan be encouraged to develop standards for nursing practice.

Implications for Nursing in Jordan

Although there are many similarities between Jordanian female and male nurses in job satisfaction, propensity to leave, and burnout, there are also important differences. In both groups there is obviously an urgent need for more career opportunities, as well as for increased opportunities for autonomy and personal growth. Improved leadership on the part of supervisory staff could further enhance job satisfaction among nurses.

In conclusion, if hospitals in Jordan are to retain male staff nurses, senior personnel will have to examine the factors that lead men to identify less than women with their place of work. If this issue is not addressed, it is likely that turnover among men will remain high. Studies from other countries have suggested that as more men are employed in nursing, the complexion and thrust of the profession will change (Cyr, 1992; Garvin, 1976) and that men may help to achieve more power, autonomy, and professionalism in nursing (Cyr; Davis-Martin, 1984; Silver & McAtee, 1972). Such changes could also occur in Jordan.

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