

Perceived Work-Related Stressors and Its Relationship with the Physiological and Psychological Well Being of Nursing Faculty Members

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Abstract

Background: Work related stress in nursing education is gaining the attention of nurseeducators and nurse researchers as the effects of stress on learning, persistence, academic success, and student satisfaction have been recognized. Nurse educators are facing the challenge of creating new ways of teaching and facilitating enhancedlearning experiences in clinical practice environments that are inherently complex, highly demanding, and unpredictable. The literature consistently reports the negativeeffects of excess stress and unsupportive relationships on wellbeing, self-efficacy, self-esteem,learning, persistence, and success (Del Prato et. al 2011).**Aim of the study:** The research study was looking at exploring the perceived work-relatedstressors and its relationship with the physiological and psychological wellbeing ofnursing faculty members working at the 3colleges of nursing affiliated to the National Guard health affairs, King Saud bin AbedAL Aziz for health sciences.**Methods:** An exploratory correlation comparative research design was utilized and a nonprobability (convenience) sample was designed to include all nursing facultymembers from the three sister colleges. The tool of this study consists of 5 main partsincluding the sociodemographic data of the participants and the Health and SafetyExecutive Management standards indicator tool (HSE indicator Tool) developed byCousins et al., (2004), comprises 35 items within seven stressor subscales in the formof short sentences and uses a 5-point Likert response scale to explore the work relatedstressors among nursing faculty members. **Results:** A total of 82 faculty members currently working in the three sister nursing colleges affiliated to King Saud bin Abdul-Aziz University or Health Sciences ,more than three quarters of the participants were non Saudi (n = 67, 81.7 %) .With regard to the work-related stressors all participants in the three settings mentioned that they have to work intensively as the most reported stressor with mean scores of 1.76 + 1.13, 2 + .83 and 2.27 + .55 for Riyadh, Jeddah and Alahssa subjects respectively.Kruskal-Wallis test showed statistically significant difference between the three groups with regard to their agreement about the statement “I find my job stressful” k = 6.531, p = .048.Three major sources of stress were identified including: insufficient funding and resources; unreasonable expectations from colleagues; and “lack of promotion opportunity” **Conclusion and Recommendation:** Work related stressors can no longer be considered an occasional, personal problem to beremedied with palliatives. It is becoming an increasingly global phenomenon, affecting allcategories of workers, all workplaces and all countries.From the results of the current study we can conclude that the academic staffs perceived their Job as stressful besides the difference in their perception to the factors and resources causing stress. Therefore, there is a need to understand the nature ofthat problem and to better manage it as, those stressors can detrimentally influence job satisfaction, psychological well-being and physical health.

Key words: Workplace stress, physiological wellbeing, psychological wellbeing, nursing faculty members, nurse educators, health and wellbeing

Introduction

Workplace Stress, Health and Wellbeing

“While definitions and measures of health and well-being vary, there tend to be two salient person-related concepts that are often combined with a more societal-level perspective. Health and well-being can refer to the actual physical health of workers, as defined by physical symptomatology and epidemiological rates of physical illness and diseases. Health and well-being also can refer to the mental, psychological, or emotional aspects of workers as indicated by emotional states and epidemiological rates of mental illnesses and diseases.” (Danna & Griffin 1999, p. 361). Work is generally good for people if it is well designed, but it can also be a great source of pressure. Pressure can be positive and a motivating factor, and is often essential in a job. It can help us achieve our goals and perform better. Stress occurs when this pressure becomes excessive. Stress is a natural reaction to too much pressure.

Workplace stress is the response that people may experience when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope (Goldberg & Comstock 1976). It has been described as an emotional experience associated with nervousness, tension and strain, brought about by factors related to work (Lerner et al., 1994). Workplace stress is a concern for both employees and employers, with national and international statistics showing the prevalence has grown steadily over recent years as in UK the University and College Union's 2010 surveyed its members 'experience of occupational stress, they reported that there was a high level of agreement among respondents (81%) of higher education to the statement "I find my job stressful" compared with 74% in the 2008 survey (Kinman, 2011)

Theoretical underpinnings, Stress theory

Lazarus and Folkman (1984) defined stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her wellbeing". They posit that cognitive appraisal of a stressor determines whether the stressor is interpreted as a challenge, threat, or harm/ loss, and defined challenge as the aptitude for mastery or growth, threat as the possibility of harm, and harm/loss as an injury or loss which has already occurred. An event will be perceived as stressful if the individual evaluates that event as threatening (primary appraisal) and also perceives a lack of personal resources and depleted coping capacity to deal with the threatening situation (secondary appraisal). Furthermore, Lazarus and Folkman suggest an inverse relationship between stress and working satisfaction; that is, as stress increases, working satisfaction decreases (Del Prato et al., 2011)

Stress and Academics

It is observed that over the last two decades there have been fundamental changes in the context and conditions of academic work in the kingdom of Saudi Arabia (KSA) There has been a dramatic expansion in student numbers with a more "consumer oriented" approach to study. This has presented a considerable challenge for the sector of professionals working in universities, as there has not been a corresponding increase in staffing levels. The university sector in the KSA has responded to these demands with strengthened and often more centralized systems and management structures. On the other hand, as nearly 80% or more of academics are non-Saudi, the levels of job security experienced by academics working in KSA universities have been eroded.

The impact of stress on the physical and mental health as well as the productivity of both the organization and the employee is a growing concern of organizations (AL-OMAR, 2003). Literature includes hundreds of stress definitions most of which involve the complex interaction between a person and his/her work environment. Within this context stress refers to the situation at which a person's skills and ability do not match with the work demands and requirements, and/or when the employees' needs are not fulfilled by the job environment (Al-Omar, 2003).

As yet, little research has been conducted in the Arabian countries that examines the stressors experienced by academic staff; however, much of what is known about the occupational stress experienced by academic staff is based on research conducted in North America (e.g. Gmelch, Lovrich and Wilkie, 1984; Blix, Cruise, Mitchell & Blix, 1994; Leung, Sui & Spector, 2000) and Australia and New Zealand (e.g. Boyd & Wylie, 1994) ;(Winefield et al., 2003). These studies invariably conclude that occupational stress has increased in their academic sector. The main stressors identified include heavy workload, time and resource constraints, long working hours, poor pay, poor communication, role ambiguity and overload, lack of recognition, striving for publication, providing support for students and keeping up with technological advances. Winefield et al., (2003).

More recently, studies conducted over the last few years in the UK and other countries such as Australia, Canada, the USA, India and China indicate that work-related stress is widespread in higher education (Pandey&Tripathi, 2001, Tytherleigh et al., 2005, Kinman et al., 2006, Zhang, 2007, Catano et al., 2007, Court & Kinman, 2008, Winefield et al., 2008 & Buckholdt & Miller, 2009). Research at a national level in the UK has reported that a number of work-related stressors and high levels of strain in the higher education sector. (Tytherleigh et al. 2005) sampled employees from 14 higher education institutions and found that the most significant stressor was job insecurity, followed by poor work relationships, lack of job control and inadequate resources and communication. Two national studies conducted in the UK in 1998 and 2004 reported in Kinman et al. (2006) highlighted perceptions among higher education employees that demands had accelerated in recent years and that levels of job control and support had declined. Other aspects of work considered to be particularly stressful were rushed,pace of work, lack of respect and esteem, too much administrative paperwork, inadequate administrative and technical support, lack of opportunity for promotion and ineffective communication. Work-life balance was found to be generally poor and levels of psychological distress exceeded those of many other professional groups and the general population. A more recent study of 9740 employees in the higher education in the UK has found that nearly half the respondents indicated that their general level of stress was high or very

high, with nearly one-third indicating that they often experienced levels of stress they found unacceptable (Court & Kinman, 2008).

In 1998, a national study of 650 lecturers and researchers working in UK universities examined perceptions of the recent changes in the sector, together with the job characteristics and working conditions that were considered to be the most demanding (Kinman, 1998; Kinman & Jones, 2003). Unlike the majority of studies that have investigated stress in academic staff, relationships between job demands and strain (i.e. psychological wellbeing, job satisfaction and leaving intentions) were also assessed. A significant majority of respondents maintained their jobs had become more stressful over the preceding five year period. Three-quarters of the sample indicated that they worked longer hours and working during evenings and weekends had become commonplace. Forty-four per cent of respondents had seriously considered leaving higher education. In general, respondents reported a reasonable degree of control over how they structured their working day, but levels of autonomy were thought to have eroded over recent years.

Also, they were highlighted a number of job demands; some of the most stressful aspects of academic work reported (such as work overload, unsatisfactory communication, poor management and lack of promotion prospects) are likely to be found in any type of employment, whereas others (such as “information overload”, obtaining research funding and teaching large numbers of students) are more job-specific. The level of psychological distress found in this study was considerably higher than that found in other professional groups and the UK population as a whole (Mullarkey et al, 1999 & Taylor et al., 2004). The literature consistently reports the negative effects of excess stress and unsupportive relationships on wellbeing, self-efficacy, self-esteem, learning, persistence, and success. (Del Prato, et., al 2011). Respondents who reported a higher level of demand were not only more psychologically distressed, but were also less satisfied with their jobs and more likely to have seriously considered career options outside academia. Factors such as lack of influence over decision-making, poor career prospects and poor management of change had particularly strong associations with psychological distress and job dissatisfaction, but the main predictor of strain was perceived conflict between the work and non-work domains.

Stress in nursing education is gaining the attention of nurse educators and nurse researchers as the effects of stress on learning, persistence, academic success, and student satisfaction have been recognized. Nurse educators are facing the challenge of creating new ways of teaching and facilitating enhanced learning experiences in clinical practice environments that are inherently complex, highly demanding, and unpredictable.

The literature consistently reports the negative effects of excess stress and unsupportive relationships on wellbeing, self-efficacy, self-esteem, learning, persistence, and success. (Del Prato, et, al., 2011)

Regarding sources of work-stress among nurses’ educators, previous research revealed that there are many causes correlated to work-stress including worker personality and the work environment (Al-Omar 2003).

Stressors among nurse educators were reported to always carry great responsibility in their organizations, yet this high level of responsibility is often combined with low decision-making power (Bauder 1982). This, in turn, causes undue stress that may decrease job satisfaction and increase the risk of burnout. Burnout has been identified as an issue for nurse educators (Fong 1990). Too many tasks in too little time are frequent complaints among educators. Nurse educators must teach, counsel students, and work on committees, as well as engage in clinical practice with students (Brown 1991). With advancing medical technology, nurse educators’ skills rapidly become obsolete and the pressure to keep abreast and to maintain effective skills cause distress. Finally, lack of respect and positive reinforcement from administrators create job dissatisfaction and the risk of burnout (Langemo 1988). Krahn (2000) studied the stressors experienced by 10 college nurse educators, who reported that continual budget cuts and increasing class sizes challenged their ability to meet role expectations. This was compounded by exhaustion from enlarged teaching assignments, perceived lack of support, and decreasing job satisfaction. Themes emerging from the participants’ stories included feeling devalued, bowing to the ‘status quo’, and conflicting with others.

Significance of the Study

Work related stress is increasingly recognized as one of the most serious occupational health hazards reducing workers’ satisfaction and productivity, and increasing absenteeism and turnover (Gianakos, 2000 & Ahsan et al., 2009). As yet, little research has been conducted in the Arabian countries that examine the stressors experienced by academic staff. In addition, there is scattered research about the prevalence of stress, emotional problems and chronic conditions among staff members working in nursing education as well as no similar studies have been found in the Saudi community. Therefore, the current study will contribute to better understanding of the interrelationship between perceived work related stressors and its impact on the health and wellbeing of nursing faculty members.

Aim of the Study

The aim of the current study was to explore the perceived work related stressors and its relationship with the physiological and psychological well being among nursing faculty members working at the three colleges of nursing affiliated to the national guard health affairs, king Saud bin Abd alaziz university for health sciences.

Accordingly this research study aimed at achieving the following specific objectives:

1. Describe the frequency of exposure to stressors among faculty members in Jeddah, Riyadh and Alahssah.
2. Measure the interrelationship between work place stressors, psychological and physiological wellbeing and sociodemographic characteristics
3. Identify the predictor factors for physiological and psychological problems
4. Compare the seven stressor subscales among the three colleges of nursing faculty staff members

Subjects and Methods

Research Design

An exploratory correlation comparative research design was utilized in the present study. The study was conducted in the three nursing colleges at Jeddah, Riyadh, and Alahssa, king Saud University for health sciences Affiliated to National Guard Health affairs

Subjects

A non probability (convenience) sample of 82 nursing faculty members from the three sister colleges' nursing departments, including: full professors, associate professors, assistant professors, lecturers as well as teaching assistants and clinical instructors.

The three nursing department faculty members were compared throughout the study to explore and describe the psychosocial factors related to occupational stressors such as demands, control measure, peer support, relationship, managerial support, role and changes and its effect on the health and wellbeing of faculty staff members working in the three nursing colleges affiliated to National Guard.

Tool of the Study

The tool of this study consists of five main parts:

Part One: sociodemographic data sheet of the participants, including academic title, age, nationality, marital status, number of children, age of children, language at work and, tongue or spoken language.

Part Two: The Health and Safety Executive Management standards indicator tool (HSE indicator Tool) developed by Cousins et al., (2004). HSE's Management Standards Indicator Tool is a 35-item questionnaire relating to the seven primary stressors identified in the Management Standards for Work Related Stress. The items are based on the best available evidence linking work design to health outcomes. It has been designed to support the process described in the Management Standards by providing a broad indication to organisations of how well their workforce rate their performance in managing the risks associated with work related stress. The HSE Indicator Tool comprises 35 items within seven stressor subscales in the form of short sentences and uses a 5-point Likert response scale. Responses to each item range from 0 = never, 1 = seldom, 2 = sometimes, 3 = always for positively or negatively keyed items. Higher scores denoting more Wellbeing and lower scores representing more distress relating to each dimension. The seven subscales include :

1. Demands include workload, pace of work and working hours
2. Control measures levels of autonomy over working methods, as well as pacing and timing
3. Peer support encompasses the degree of help and respect received from colleagues
4. Managerial support reflects supportive behaviours from line managers and the organisation itself, such as the availability of feedback and encouragement
5. Relationships assesses levels of conflict within the workplace
6. Role examines levels of role clarity and the extent to which employees believe that their work fits into the overall aims of the organisation
7. Change reflects how well organisational changes are managed and communicated

The tool was selected because it is a well-validated and normed instrument. It has built-in validity measures (positive and negative scales) to detect response inconsistency, to reduce response bias, and to increase the accuracy of the results. Further, normative averages have been calculated from nearly five thousand members of university and college union (UCU) 2,500 working in further education, and 2,500 in higher education participated in a self-reported survey regarding their work related stressors.

The HSE stress questionnaire assessment approach is considered a highly structured framework as it to diagnose the most stressful aspects of work in individual organisations, occupational groups and sectors. The process allows employers to assess how well they are managing the different hazard categories, and develop more precisely targeted interventions to enhance the work-related wellbeing of their staff.

Part Three: consisted of three questions reflecting the overall perception of stress

Part Four: consisted of 18 short statement reflecting the factors contributing to perceived stressors ranging from 0 – 3 with 0 indicates no stress, 1 = indicate mild stress, 2 = moderate stress and 3 = severe level of stress stress.

Part Five: psychological and physical wellbeing scale, this scale is concerned with the evaluation of physical and psychological health of faculty staff members. It consists of two main part, psychological wellbeing: it is a 12 – items Likert scale from ranging from 1- 4 as 1= never, 2= rarely, 3 = sometimes, and 4 = always. Physical wellbeing this was measured by 19 – items on a likert scale from 1- 4 as 1= never, 2= rarely, 3 = sometimes, and 4 = always

Data Management and Analysis Plan

Statistical Package for the Social Science (SPSS 18) was used to analyze the data. Collected data was coded, validated, cleaned and missing data was controlled before analysis. Descriptive statistics was used to describe the distribution of all study variables. Frequencies and cross tabulation procedures was conducted accordingly. Appropriate statistical test such as t-test, ANOVA, Chi-square, and Pearson Product Moment Correlation was conducted to determine relationships that exist between selected demographic variables (age, gender, education, marital status, and occupation) and perceived work-related stressors and perceived health status among the participants.

Ethical Considerations

IRB approval to conduct the study was obtained from the authorized committee, and written approvals from appropriate authorities at the proposed data collection settings was obtained. In addition, the participants were informed about the nature and the purpose of the study, and that their participation is voluntary and that they can withdraw from the study at any time. A written consent was obtained from all participants. Confidentiality and anonymity of the collected data was assured and made clear that collected data will be used only for the research purposes and will be kept locked and confidential with access only for the research team. Researcher and IRB committee contact information was provided to participants for further information regarding the study.

Results

Demographic and Academic Characteristics

Subjects included in the study were 82 faculty members currently working in one of the three sister nursing colleges affiliated to King Saud bin Abdulaziz University or Health Sciences in Riyadh (25 participants, 30.5%), Jeddah (35 participants, 42.7%) or Alahssa (22 Participants, 26.8%). More than three quarters of the participants were non Saudi (n = 67, 81.7%) while only fifteen (18.3%) faculty members were Saudi nationality. The academic rank ranged between full professors (n = 3, 3.7%) to teaching assistant (n = 33, 40.2%). Educational background were as following 28, 34.1% holding a PhD in nursing sciences, 32, 39% have a master degree in nursing and 22, 26.8% completed their Bachelor degree in nursing. Years of work in their current job ranged between only one month and nine years with a mean of 2.152 ± 2.1 year. Age of the participants ranged between 23 and 62 years with a mean of 39.61 ± 10.55 . Majority of the participants were married (n = 64, 78%) while thirteen (15.9%) participants were single and only three (3.7%) were divorced and two (2.4%) were widowed. Almost three quarters of the subjects (74.1%) have children, the number of children ranged between 1 and 4 with the majority of the (43.1%) having two children followed by three children (31%) and one child (20.7%) while only 5.2% have four children.

With regard to the work-related stressors all participants in the three settings mentioned that they have to work intensively as the most reported stressor with mean scores of 1.76 ± 1.13 , $2 \pm .83$ and $2.27 \pm .55$ for Riyadh, Jeddah and Alahssa subjects respectively.

Table 1: Comparison of the Demographic Characteristics (n = 82)

Variable	Riyadh N = 25 (%)	Jeddah N = 35 (%)	Alahssa N = 22 (%)	Test of significance	P value
Marital status					
Married	23 (92)	22 (62.9)	19 (86.4)	$X^2 = 12.351$	0.055
Single	1 (4)	11 (31.4)	1 (4.5)		
Divorced	1 (4)	1 (2.9)	1 (4.5)		
Widowed	0 (0)	1 (2.9)	1 (4.5)		
Do you have children					
Yes	20 (80)	21 (61.8)	19 (86.4)	$X^2 = 4.874$	0.088
No	5 (20)	13 (38.2)	3 (13.6)		
Nationality					
Saudi	5 (20)	8 (22.9)	2 (9.1)	$X^2 = 1.783$	0.410
Non Saudi	20 (80)	27 (77.1)	20 (90.9)		
Living with family					
Yes	16 (80)	9 (36)	13 (72.2)	$X^2 = 10.479$	0.005
No	4 (20)	16 (64)	5 (27.8)		
Mother language					
Arabic	18 (72)	13 (37.1)	12 (54.5)	$X^2 = 7.158$	0.028
Non-Arabic	7 (28)	22 (62.9)	10 (45.5)		

Table2: Comparison of the Academic Background Characteristics (n = 82)

Variable	Riyadh N = 25 (%)	Jeddah N = 35 (%)	Alahssa N = 22 (%)	Test of significance	P value
Academic title					
Professor	1 (4)	1 (2.9)	1 (4.5)	$X^2 = 13.176$	0.106
Associate professor	0 (0)	2 (5.7)	2 (9.1)		
Assistant professor	9 (36)	7 (18)	4 (20)		
Lecturer	10 (40)	5 (14.3)	7 (31.8)		
Teaching assistant	5 (20)	20 (57.1)	8 (36.4)		
Degree					
PhD or equivalent	11 (44)	10 (28.6)	7 (31.8)	$X^2 = 7.123$	0.130
Master	9 (36)	11 (31.4)	12 (54.5)		
Bachelor	5 (20)	14 (40)	3 (13.6)		

Table3: Comparison of the overall perception of stress (n = 82)

Statement	Riyadh N = 25 (%)	Jeddah N = 35 (%)	Alahssa N = 22 (%)	Test of significance	P value
I find my job stressful					
Disagree	13 (52)	9 (25.7)	1 (4.5)	6.531	0.038
Neutral	6 (24)	17 (48.6)	14 (63.6)		
Agree	6 (24)	9 (25.7)	7 (31.8)		
How would you characterize your level of stress					
Mild	10 (40)	15 (42.9)	6 (27.3)	1.639	0.441
Moderate	15 (60)	17 (48.6)	14 (63.6)		
Sever	0 (0)	3 (8.6)	2 (9.1)		
Do you experience levels of stress that you find unacceptable?					
Yes	8 (32)	13 (37.1)	3 (13.6)	3.690	0.158
No	17 (68)	22 (62.9)	19 (86.4)		

Kruskal-Wallis test showed statistically significant difference between the three groups with regard to their agreement about the statement “I find my job stressful” $k = 6.531$, $p = .048$, while there was no statistically

significant differences between the three groups in relation to their characterization of their level of stress as either mild, moderate or severe ($k = 1.639$, $p = .441$ and 3.690 , $p = .158$ respectively).

Table4: Comparison of the Contributing Factors for Work-related Stress as Perceived by Faculty Members (n = 82)

Contributing Factor	Riyadh N = 25	Jeddah N = 35	Alahssa N = 22	Test of significance X^2	P value
Job insecurity	0.84 ± 0.98	0.74 ± 0.78	0.77 ± 0.75	5.394	0.494
Lack of promotion opportunities	1.32 ± 1.21	0.97 ± 0.95	1.68 ± 1.71	10.332	0.111
Discrimination	1.44 ± 1.26	1.49 ± 0.98	1.14 ± 1.18	8.053	0.234
Complaints by other members of staff	1.0 ± 1.04	1.09 ± 0.82	1.32 ± 1.04	5.219	0.516
Excessive workload	0.97 ± 1.17	0.51 ± 0.85	1.11 ± 0.99	10.413	0.237
Unreasonable expectations from colleagues	1.56 ± 1.04	1.49 ± 0.98	1.36 ± 1.0	4.274	0.640
Unreasonable expectations from students	0.72 ± 0.79	1.26 ± 0.89	1.18 ± 0.91	8.187	0.225
Unreasonable expectations from head of department	0.84 ± 0.85	1.23 ± 0.84	1.36 ± 0.95	6.044	0.418
Lack of opportunities for training	0.92 ± 0.86	1.18 ± .87	0.68 ± 0.84	5.567	0.473
Lack of career development	1.08 ± 1.11	1.31 ± 0.96	1.0 ± 0.93	5.467	0.485
Poor work-life balance	1.16 ± 1.07	1.37 ± 0.97	1.23 ± 1.15	3.573	0.734
Complaints by students	1.0 ± 1.0	1.29 ± 0.86	1.32 ± 1.17	13.300	0.039
Lack of time to undertake research	0.76 ± 0.78	1.11 ± 0.96	1.18 ± 1.05	10.537	0.104
Lack of resources to undertake research, including problems in obtaining funding	1.60 ± 1.12	1.06 ± 1.11	1.50 ± 1.10	4.976	0.547
Insufficient time to respond to student queries	1.16 ± 1.18	0.77 ± 0.97	1.50 ± 1.10	4.042	0.671
Teaching large classes	0.72 ± 0.54	0.86 ± 0.85	1.05 ± 0.99	8.381	0.211
Lack of choice in the courses you teach	0.84 ± 0.98	0.94 ± 0.91	0.91 ± 0.92	9.355	0.155
Lack of choice in carrying out research	1.04 ± 0.98	0.98 ± 0.99	0.86 ± 1.08	10.624	0.101

Looking at the factors contributing to work-related stress as perceived by the study subjects, analysis of the data revealed that faculty members working in College of Nursing – Riyadh reported “lack of resources to undertake research including problems in obtaining fund” as the main source of work-related stress ($M = 1.60 \pm 1.12$) followed by “unreasonable expectations from colleagues” ($M = 1.56 \pm 1.04$). Faculty members working in College of Nursing – Jeddah reported “unreasonable expectations from colleagues” as the main source of work-related stress ($M = 1.49 \pm .98$), followed by “poor work-life balance” ($M = 1.37 \pm .97$). Faculty members working in College of Nursing – Alahssa reported “lack of promotion opportunity” as their main source of work-related stress ($M = 1.68 \pm 1.71$) followed by “lack of resources to undertake research including problems in obtaining fund” ($M = 1.5 \pm 1.1$).

Between groups differences concerning contributing factors for work-related stress as perceived by faculty members showed only statistically significant difference between the three groups in relation to “complaints by students” ($X^2 = 13.300$, $p = 0.03$).

Table5: Comparison of the Physical Wellbeing Scale Items as Perceived by Faculty Members (n = 82)

Sign / Symptom	Riyadh N = 25	Jeddah N = 35	Alahssa N = 22	Test of significance X ²	P value
An upset stomach or nausea	2.16 ± 1.11	1.91 ± 0.95	1.77 ± 0.81	5.433	0.49
A backache	2.72 ± 1.02	2.49 ± 1.09	2.77 ± 0.92	3.260	0.78
Trouble sleeping	2.68 ± 1.11	2.31 ± 0.90	2.45 ± 0.91	10.562	0.10
A skin rash	1.60 ± 0.91	1.57 ± 0.88	1.32 ± 0.65	1.867	0.93
Shortness of breath	1.84 ± 0.80	1.37 ± 0.65	1.41 ± 0.85	13.403	0.04
Chest pain	1.60 ± 0.81	1.43 ± 0.70	1.64 ± 0.95	5.827	0.443
Headache	2.88 ± 1.05	2.57 ± 0.92	2.68 ± 1.04	5.479	0.484
Fever	1.44 ± 0.58	1.37 ± 0.55	1.23 ± 0.53	3.327	0.505
Acid indigestion or heartburn	2.24 ± 1.09	1.77 ± 0.97	1.91 ± 0.97	6.547	0.365
Eye strain	2.28 ± 1.14	2.20 ± 1.11	2.95 ± 0.99	10.104	0.120
Diarrhea	1.64 ± 0.57	1.54 ± 0.74	1.36 ± 0.58	6.014	0.422
Stomach cramps (Not menstrual)	1.58 ± 0.58	1.89 ± 1.83	1.59 ± 0.80	11.370	0.182
Constipation	1.60 ± 0.76	1.63 ± 0.88	1.50 ± 0.80	2.850	0.827
Heart pounding when not exercising	1.88 ± 0.97	1.80 ± 0.83	1.59 ± 0.79	8.985	0.174
An infection	1.48 ± 0.59	1.46 ± 0.78	1.55 ± 0.80	4.131	0.859
Loss of appetite	1.68 ± 0.75	1.71 ± 0.96	1.77 ± 0.92	3.059	0.801
Excessive hunger "Overeating"	2.04 ± 0.90	1.86 ± 0.97	1.68 ± 0.89	3.601	0.730
Dizziness	2.12 ± 0.83	1.74 ± 0.78	1.77 ± 0.81	3.737	0.443
Tiredness or fatigue	2.64 ± 0.95	2.57 ± 0.78	3.00 ± 0.87	7.793	0.254

The most commonly reported physical problem reported by faculty members working in Riyadh were headache (2.88 ± 1.05) followed by trouble sleeping (2.68 ± 1.11) and tiredness and fatigue (2.64 ± .95). Faculty members working in Jeddah reported headache and tiredness and fatigue as the most common physical problems they experience (3.00 ± .87 & 2.57 ± .92). Tiredness and fatigue was reported as the most frequent physical complaint by the faculty members working in Alahssa with a mean of 3.00 and a standard deviation of 0.87, followed by backache (2.77 ± 0.92). Chi square revealed no statistically significant difference between faculty members working in the three different locations with regard to the experienced physical symptoms after working in the three sister nursing colleges in Riyadh, Jeddah and Alahssa.

Table 6: Comparison of the Psychological Wellbeing Scale Items as Perceived by Faculty Members (n = 82)

Sign / Symptom	Riyadh N = 25	Jeddah N = 35	Alahssa N = 22	Test of significance X ²	P value
Been able to concentrate on whatever you are doing	3.13 ± .99	3.29 ± .96	3.50 ± .74	5.863	0.439
Lost much sleep over worry	2.40 ± 1.04	2.0 ± 1.0	2.55 ± .86	7.367	0.288
Felt that you are playing a useful part	2.92 ± .95	3.20 ± .76	3.32 ± .09	12.246	0.057
Felt capable of making decisions	3.12 ± .93	3.31 ± .72	3.36 ± .73	11.696	0.069
Felt constantly under strain	2.56 ± .92	2.26 ± .85	2.68 ± .84	4.453	0.616
Felt you couldn't overcome your difficulties	2.0 ± .71	1.91 ± .85	2.27 ± .77	14.579	0.024
Been able to enjoy your normal day to day activities	2.96 ± .89	3.34 ± .80	3.09 ± .87	6.337	0.387
Been able to face up your problems	3.32 ± .90	3.71 ± .52	3.68 ± .48	9.437	0.150
Been feeling unhappy and depressed	1.84 ± .75	2.26 ± .89	2.14 ± .77	5.123	0.528
Been losing confidence in yourself	1.32 ± .48	2.0 ± .91	2.09 ± .97	16.652	0.011
Been thinking of yourself as a worthless person	1.12 ± .33	1.49 ± .89	1.50 ± .80	6.452	0.375
Been feeling reasonably happy	3.20 ± .96	3.57 ± .56	3.45 ± .74	13.770	0.032

The most reported items of the psychological well being scale were "been able to face up your problems" followed by "been feeling reasonably happy", "been able to concentrate on whatever you are doing" and "felt capable of making decisions" respectively. The three groups were comparable in most of the scale items with the

exception of “been losing confidence in yourself” ($X^2 = 16.652$, $p = 0.01$), “felt you couldn’t overcome your difficulties” ($X^2 = 14.579$, $p = 0.0$), and “been feeling reasonably happy” ($X^2 = 13.770$, $p = 0.03$).

Spearman correlation showed no statistically correlation between the participants’ age in years and their agreement about the statement “I find my job stressful “($r = -.178$, $p = 0.121$) and their description of the level of perceived stress as mild, moderate or severe as indicated by ($r = -.127$, $p = 0.270$)

Independent sample t test revealed statistically significant difference in the mean age between those participants who agreed that they experience levels of stress that they find unacceptable ($M = 34.83$, $SD = 10.97$) and those who didn’t agree that they experience levels of stress that they find unacceptable ($M = 41.65$, $SD = 9.78$) as evidenced by $t = 2.702$, $p = 0.009$.

Table 7: Relationship between the Overall Perception of Stress and Participants’ Demographics (n = 82)

Variable	I find my job stressful			Test of significance	P value
	Disagree	Neutral	Agree		
Marital status				$X^2 = 5.676$	0.460
Single	2 (2.4)	7 (8.5)	4 (18.2)		
Married	20 (24.4)	29 (35.3)	15 (18.2)		
Divorced	1 (1.2)	0 (0.0)	2 (2.4)		
Widowed	0 (0.0)	1 (1.2)	1 (1.2)		
Degree				$X^2 = 9.747$	0.045
PhD or equivalent	13 (15.9)	8 (9.8)	7 (8.5)		
Master	8 (9.8)	15 (18.3)	9 (11.0)		
Bachelor	2 (2.4)	14 (17.1)	6 (7.3)		
Academic title				$X^2 = 17.997$	0.021
Professor	2 (2.4)	0 (0.0)	1 (1.2)		
Associate professor	1 (1.2)	2 (2.4)	1 (1.2)		
Assistant professor	9 (11.0)	6 (7.3)	5 (6.1)		
Lecturer	8 (9.8)	6 (7.3)	8 (9.8)		
Teaching assistant	3 (3.7)	23 (28.0)	7 (8.5)		
Do you have children				$X^2 = 2.541$	0.281
Yes	19 (23.5)	28 (34.6)	13 (16.0)		
No	4 (4.9)	9 (11.1)	8 (9.9)		
Nationality				$X^2 = 5.695$	0.058
Saudi	1 (1.2)	7 (8.5)	7 (8.5)		
Non Saudi	22 (26.8)	30 (36.6)	15 (18.3)		
Living with family				$X^2 = 3.283$	0.194
Yes	12 (19.0)	16 (25.4)	10 (15.9)		
No	10 (15.9)	13 (20.6)	2 (3.2)		

In exploring the relationship between the overall perception of stress represented in the statement “I find my job stressful” and participants’ demographics, chi square showed only statistically significant relationship between the overall perception of stress and academic title ($X^2 = 17.997$, $p = 0.021$) and degree ($X^2 = 9.747$, $p = 0.045$) and the participants’ nationality ($X^2 = 5.695$, $p = 0.058$) while there was no relationship between the overall perception of stress and marital status, having or not having children or if living with or away from their families.

Discussion

Higher education and universities environment operate in a complex scenario comprised with people from different cultures, and generations. Roles and environment that requires a high level of communication and conflict resolution skills witness chronic stress, which finally leads to burnout. Therefore, the current research was initiated to explore the perceived work-related stressors and its relationship with the physiological and psychological well being of nursing faculty members working at the 3 colleges of nursing affiliated to the national guard health affairs, king Saud bin Abd alaziz for health sciences. The results revealed that there is a statistically significant difference between the three groups with regard to their agreement about the statement “I find my job stressful” $k = 6.531$, $p = .048$ with no statistically significant differences between the three groups in relation to their characterization of their level of stress as either mild, moderate or severe. The results is congruent with Reglin and Reitzammer (2008) who found that teachers regardless of what level they teach are

exposed to high levels of stress. They suffer burnout in some extreme cases (Seldman & Zager, 2001). In African countries, research studies have shown that teachers experience high level of stress and burnout (Olaitan, 2009). In addition Iqbal, and Abbasi (2013) reported that university professors perceived their work as highly emotionally exhausted and dominated by negative emotions rather than positive emotions, feel detached or alienated rather than engaged in teaching activities, and have a sense of reduced personal accomplishment rather than a sense of meaning.

As regard to the factors contributing to the workrelated stress as perceived by the study subjects, analysis of the data revealed that faculty members working in the three nursing colleges reported that the overall stressors were related to lack of organizational and environmental support in form of lack of promotion opportunity, unreasonable expectations from colleagues, and lack of resources to undertake research including problems in obtaining fund that have a greater impact on their job satisfaction rather than stressors related to their job itself. Table [4]. This result is congruent with the work of Brewer, (2003) as he found that lack of organizational support being more strongly associated with job satisfaction than stressors related to the job itself were. Many studies have been conducted into the factors affecting workload among university employees, which have revealed two major groups can be classified into: characteristics of the working climate and educational policy, such as increasing student numbers and administrative duties, and the characteristics that are inherent to the job, like frequent interruptions and compromised personal priorities [Kinman, 1998, and 2003 & Bos et al., 2013]. Many studies had confirmed that prolonged exposure to work related stress is associated with change in physical and psychological health (Jennings, 2008), through active interactions between an individual and their working environment. During such interaction, environmental demands exceeding individual resources may be perceived as stressful and result in negative outcomes such as low job satisfaction, burnout and illness (Coyle, et al., 2005, Kohler; Munz, & Grawitch 2006). Concerning the physical and psychological wellbeing the reported physical problems among the faculty staffs working in the three sister colleges were headache followed by trouble sleeping, tiredness and fatigue and backache with no significant difference between 3 sister colleges as they perceive their job is stressful. This results are congruent with the Khamisa, Peltzer and Brian (2013) who suggested through their systematic review of the "Burnout in Relation to Specific Contributing Factors and Health Outcomes among Nurses that despite the existence of interrelationship between work related stress, burnout, job satisfaction and general health being, the complexity of these relationships can only be well understood if all variables are explored simultaneously.

Several studies distinguished between functional levels, like assistants and other academic staff versus participants with a professorship or academics versus general staff. The present study showed only statistically significant relationship between the overall perception of stress and academic title ($X^2 = 17.997$, $p = 0.021$) and degree ($X^2 = 9.747$, $p = 0.045$) and the participants' nationality ($X^2 = 5.695$, $p = 0.058$) as teaching assistant are perceiving their job very stressful than others lecturer, assistant professor and professor in the three sister nursing colleges. The interpretation behind this result is that those teaching assistants are working in different specialties in a daily base schedule and maybe working today in adult, tomorrow may be in maternity, or pediatric and they have to achieve the objectives of every course, in addition the participants' nationality plays a major role in perceiving stressors due to their feeling of homesickness and deprivation of their family members. However, so far, little attention has been given to age differences in the other studies, the current study showed no statistically correlation between the participants' age in years and their agreement about the statement "I find my job stressful" ($r = -.178$, $p = 0.121$) and their description of the level of perceived stress as mild, moderate or severe. In fact, work motivation and work goals and possibly also work behavior seem to be associated with calendar age (Kanfer & Ackerman 2004). In general, younger employees seem to focus on career advancement, salary and recognition, while older employees prefer the use of own skills (self-actualisation), to help other people and to contribute to society (De Lange et al., 2006 & Kooij et al., 2011). Although differences in age do not seem to cause differences in performance, age-related declines in fluid intellectual abilities (e.g. working memory, abstract reasoning) may impact on experienced mental workload (Kanfer & Ackerman 2004). Thus, age-related differences may affect the way employees experience their work, the work features, and work outcomes like work stress. Uncovering these views will help to optimise a healthy and stimulating working environment for university employees of all ages.

Conclusion and Recommendations:

From the results of the current study it has been concluded that academic staff perceived their job as stressful with different perceived factors related to the sources of stress, and those stressor affecting their physical and psychological wellbeing. Also, there is a statistically significant relationship between the overall perception of stress and academic degree as well, the participants' nationality.

These results have implications for addressing job stress and physical and psychological problem among faculty members in higher education and prove that teaching is stressful job. Therefore, and as noted earlier, respectively small sample size of this study should be taken into account when considering recommendations generated from the current study. Given that consideration, our first recommendation is replication of the study with a larger sample size. Also, it is recommended that future research employ a longitudinal design to gain further insights into the effects of frequently occurring stressors over an extended period of time. Continuing study of the same sample over time could give answers relative to how prolonged exposure to stressors affects the physical and mental health of the faculty members. Such information would be vital for designing stress intervention and management strategies, which could in turn effectively influence the perception of job stressors, job satisfaction, psychological well-being and physical health positively.

Acknowledgment

Researcher extends her thanks and appreciations to all faculty members who voluntarily participated in the study and shared their experience

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit divisions

Conflict of Interest

Researcher declares no conflict of interest with any organization regarding the materials discussed in this manuscript

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