Job Stress and Nurses Well-Being: Prayer and Age as Moderators

Meguellati Achour, Ilhaamie Binti Abdul Ghani Azmi, Marzuki Bin Isahak, Mohd Roslan Mohd Nor & Mohd Yakub Zulkifli Mohd Yusoff
Your article is protected by copyright and all rights are held exclusively by Springer Science+Business Media, LLC, part of Springer Nature. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer’s website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".
Job Stress and Nurses Well-Being: Prayer and Age as Moderators

Meguellati Achour1 · Ilhaamie Binti Abdul Ghani Azmi2 · Marzuki Bin Isahak3 · Mohd Roslan Mohd Nor4 · Mohd Yakub Zulkifli Mohd Yusoff5

Received: 6 January 2018 / Accepted: 13 May 2019 © Springer Science+Business Media, LLC, part of Springer Nature 2019

Abstract

There is increasing popularity among researchers, scholars, and policymakers concerning the efficacy of prayer as a coping strategy for job stress. This study examines the moderating effects of prayer and age on the relationship between job stress and nurses’ well-being in UMMC. Three hundred (300) Muslim nursing staff working at the University of Malaya Medical Centre were sampled. Data were collected via questionnaires. The findings of this study show that the effect of job stress on well-being is significant for nurses and that prayer of nurses contributed to alleviating job stress and enhancing well-being. This study is limited to nurses in one public hospital in a developing country. Thus, it would be more interesting if the study could be extended to other public and private institutions in a Muslim country, and a comparison could be done between other religions as well.

Keywords Job stress · Work-family conflict · Religion · Islamic prayer · Well-being · Nurses

Introduction

Job stress has become a common workplace problem. Work stress manifests differently in different people and settings. Numerous studies have found that higher levels of job stress are negatively associated with subjective well-being. The study of job stress in different contexts will contribute to a deeper and clearer understanding of the phenomenon and how to reduce its adverse effects on employees’ satisfaction, productivity and commitment (Aqeel and Achour 2011). In recent years, research on subjective well-being has increased dramatically in recent years (Randy et al. 1984). Subjective well-being has become an important issue and focus of strong research and interest (Achour 2013). It is an important issue in social development because personal well-being is a prerequisite to functioning in society successfully (Zotova and Karapetyan 2015).

The last decade has seen a tremendous increase in scientific interest regarding the relationships of religion/spirituality with health (Masters 2008). In life crises, religion is considered a human refuge and strong base to cope with problems, difficulties and deprivations such as job stress and illness (Moher 2006). Many researchers have found that a religious life has a positive effect on well-being (Colón-Bacó 2010). Abdel-Khalek (2010) found that religiosity among Muslim Kuwaiti adolescents was related to better health and less anxiety. Tiliouine and Belgoumidi (2009) have shown that religiosity predicts meaning and life satisfaction in Muslim students in Algeria. Nevertheless, there is much more to know regarding the effects of Islamic prayer on the well-being of Muslims, especially nurses in facing job stress as they have to handle many patients with different types of illness.

Researchers have also addressed age differences in work-related stress. For example, job satisfaction, emotional...
resilience, emotional burnout, absenteeism and turnover rates (Dawal et al. 2008; Ahmada and Scot 2014; Chew et al. 2013; Al-Dubai et al. 2013). The effects seem to be inconclusive as the results vary. Aging nurses should be an asset and not a liability to the workplace as they are more experienced, knowledgeable and skilled. Thus, this paper examines the effects of age and prayers on job stress and well-being of nurses in a developing country.

The Concept of Prayer

Scholars have defined prayer in several ways. A major cause for this difference is the different meanings and forms of prayer across the different religions. According to Salazar (2008), prayer as an act of communication with God that can be approached from the perspective of efficacy and authenticity. The efficacy of prayer refers to its power or capacity to produce certain effects. James (1963) states prayer as “every kind of inward communion or conversation with the power recognised as divine.” It is “a personal, impersonal or transpersonal way to express communion with the sacred” (Delong 1998, pp. 65, 66). It is a combination of thoughts, attitudes, and actions designed to express to God with the sacred (McCullough and Larson 1999). Ruland (1994) describes that prayer is the raising one’s mind and heart to God or requesting good things from God.

In Islam, prayer is called salat which linguistically means supplication (dua). Salat is one of the pillars of Islam. It differs significantly from the personal prayer or invocation associated with the Christian faith. In the Qur’an, the word salat can be applied to God, angels, and human beings (33:56). For God, it means that He inclines towards being merciful towards mankind; for angels, it means that they ask forgiveness for mankind; for human beings, it means supplicating to God (Ghazali2004, p. 4). In Islamic texts, prayer refers to the remembrance of Allah (Zikr). Allah said that “Those who believed and find satisfaction their hearts in the remembrance of Allah. No doubt, in the remembrance of Allah find satisfaction the hearts” (13:28). Many scholars have examined salat as a coping strategy and its role in promoting mental and physical health. Prayer, as a religious coping effort, can have a significant impact in addressing problems (Carver et al. 1989) and reducing stress and anxiety (Moberg 2005). From a mental perspective, however, salat, which requires reliance on the Creator, leads to prevention and cure of most neuroses, depressions, and even major psychosis (Karim 1984).

A Muslim is one who believes in Allah and strives for a complete reorganisation of his life according to Islamic guidance. The Muslim philosopher Ibn Arabi said: A Muslim is a person who has dedicated his worship exclusively to God (Razi 1900). Muslims are obliged to perform ritual prayers five times a day, which are as follows: dawn, noon, afternoon, sunset, and evening (Hamdan 2010). This regular schedule allows them to be punctual, disciplined, and appreciative of the value of time (Siddiqui 2008). Muslims are also required to perform the act of ablution before praying, which is the cleaning of one’s body (Hamdan 2010). Specifically, ablution includes the washing of the head, hands, arms, face, nostrils, mouth, and feet, as well as the inside and outside of the ear. According to Hamdan (2010), daily ritual prayers contain a rak‘aa, which is a uniform body movement that includes standing, bowing, prostrating, and kneeling. All Muslims are to leave their jobs and assemble in the central mosque of the area for a sermon and congregational worship at noon. Worship in Islam is a direct communication of an individual with God. It is better to worship in congregation in a mosque. Nevertheless, one can still perform the worship at home, workplace, or anywhere else.

During preparation to perform prayer, Muslims are instructed to shift their thinking as much as they can about the material nature of the world including all their burdens and worries (Achour et al. 2016). In praying, Muslims should feel an extreme connection to God from Whom they derive maximum support (Tala’at 2006). Similarly, Muslims are expected to use their prayer to transform their worries into a positive power of supplication, and to convert the meanings of invocations they use into concrete reality. In so doing, they would be able to continually demonstrate a serious commitment to their religious concerns, with increased focus and energy on the right course of action which eventually maximises their overall life productivity and performance (Achour et al. 2016).

Nursing and Coping with Stress

Researchers have defined stress differently. For example, stress is an unpleasant state of emotional and physiological arousal that people experience in situations they perceive as dangerous or threatening to their well-being (Tenibaje 2011). Lazarus and Folkman (1984) define stress as a relationship between the person and the environment that is appraised by the person as tasking or exceeding his or her resources and endangering his or her well-being. Stress gives both positive and negative responses to our actions because our rational evaluation and assumption of the stressors influences how we react and deal with it (Nekzada and Tekeste 2013). There are several sources of stress. They sometimes act in isolation or combination with other stressors. According to Zuccolo (2013), stressors are categorised into physical or psychological sources. These are further classified into environmental, social, physiological and cognitive-emotional stressors. Physical stressors affect the five senses and may include factors like noise, pollution and weather.
Other types of physical stressors are changes arising from physiological changes like puberty, menopause, adolescent and ageing, among others. Social stressors include psychological stressors arising mostly from the demand of daily living. Finally, the cognitive-emotional arises from our thoughts as a response to changes in our environment. The major sources of stresses for nurses as contained in the literature (Sharma et al. 2008; Lockley et al. 2007; Embriaco et al. 2007) include workload, working hours, work environment, and interpersonal relationships. According to the Leka et al. (2003), the sources of work stress can be categorised into work content and work context. Work content includes job content, workload, working hours and participation/control. Work context may include factors like career development, job status and titles as well as pay and allowances. The extent to which an employee is satisfied with their working conditions and the extent to which they feel secure in their job could constitute sources of stress. Leka et al. (2003) also listed unclear or conflicting roles in the organisation, poor interpersonal relationships with either supervisors or poor relationships with colleagues, poor organisational cultures such as poor communication, poor leadership or lack of behavioural rules, unclear organisational objectives and strategies as well as conflicting work-life balance.

Lockley et al. (2007) agreed with Fielden and Peckar (1999) and concluded that extended duration of work shifts significantly increase fatigue and impair performance. Other studies mentioned high workloads as a source of job stress among nurses (Muncer et al. 2001). Nursing is a stressful job when compared with other jobs (Chan et al. 2000). A survey conducted in four provinces in Indonesia showed that about half (50.9%) of public and private hospital nurses experienced workplace stress (Rachmawati 2007). Furthermore, more than half (60%) of the sampled hospital nurses experienced high levels of workplace stress (Shaulim 2008). Another study in in-patient units of a public hospital found that workload was the most commonly reported workplace stressor (Ilmi 2003). Loo and Leap (2012) studies the causes and effects of job stress and coping mechanism among nurses in public health services of Malaysia about. The respondents identified that inconsiderate and inequitable superior/matron, lack of recognition and conflict within and between groups were stressors. The respondents also view social support as a buffer against the dysfunctional consequences of stress emanating from the workplace and established a network of friends, family, superior, peers, and colleagues to seek emotional support when faced with job-related stress in the workplace. They adopted more than one coping mechanism to combat job stress based on scenarios, situations, and level of job stress.

Haslinda and Tyng (2016) found that a major contributor to job stress among nurses is the job itself, heavy workload, repetitive work, and poor working environment. Their results clarify the relationship between the job, the work environment, individual differences and management support with coping mechanisms to reduce job stress among nursing staff in Malaysian private hospitals.

Researchers have identified numerous approaches, strategies, and techniques for coping with life stressors. Among the numerous strategies are relaxation, meditation, imagination and yoga. Recent studies add to these strategies by indicating that religious coping strategies contribute to a reduction and buffering of job stressors (Achour et al. 2016).

Turton and Francis (2007) identified a positive correlation between prayer and work-related psychological health. It is an integral part of religious and spiritual practices. Further, Bacchus and Holley (2004) found that individuals use prayer to find personal strength, peace, and guidance to cope with stressful situations in the workplace. When combining employee’s perception of workplace equity with prayer as a motivating factor and coping mechanism, it motivates them to achieve goals and cope with workplace stress (Adams 2008). Praying and having faith in God are strategies used most frequently to cope with personal problems (Koenig et al. 1988; Bade and Cook 2008).

In Malaysia, Loo and Leap (2012) investigated the prominent causes and effects of job stress and coping mechanisms among nurses in public health services. They found that the nurses turn to prayer or spiritual practices to help ease stress. Ghufran (2011) studied the relationship between collective religious practices, life satisfaction, and psychological well-being among 200 Muslims aged 65–75 years. He compared 100 Muslims who performed religious prayers in the mosque collectively five times a day and 100 Muslims who did not attend collective prayers regularly. The results indicate significantly greater life satisfaction and well-being for those who participated in the collective religious prayers regularly versus those who did not attend regularly. Achour (2013) conducted face to face interviews with five Muslim women from the University of Malaya, Malaysia. He concluded that most Muslim women were aware of the difficulties related to balancing work demands and family roles and that most interviewees used religiosity including prayer as a strategy to cope with the conflicts and job stress.

**Age and Job Stress**

Many researchers have examined age differences in work-related variables (Baltes and Finkelstein 2011). As a result, a body of knowledge has formed regarding the relationship between age and several important work-related outcome variables, such as job attitudes (Ng and Feldman 2010), job satisfaction (Brush et al. 1987; Dawal et al. 2008), organisational commitment (Cohen 1993; Kamarul and Raida 2003), voluntary turnover (Healy et al. 1995), and absenteeism.
Researchers have also addressed age differences in work-related stress (e.g. Rauschenbach and Hertel 2011; Siu et al. 2001). For example, job change proposition (cf. Wright and Hamilton 1978) explains that, on average, older workers show higher levels of job satisfaction than their younger co-workers (Quinn et al. 1974; cf. Ng and Feldman 2010; Chew et al. 2013).

Other age-related conditions, however, suggest that older workers might experience increased levels of work-related stressors (Abdul Hadi et al. 2009; Rauschenbach et al. 2012) such as higher emotional burnout (Al-Dubai et al. 2013). One such condition might be that older workers are discriminated against by their younger colleagues or by organizational policies. Age stereotypes are common at work (Hedge 2006) and often include negative assumptions about older workers. For example, older workers are perceived as being less creative (Levin 1988), lower in emotional resilience (Rauschenbach et al. 2012), less interested in technology, and less suited to teamwork (Lyon and Pollard 1997; Wok and Hashim 2013).

### Research Validity

Validity has been defined as the degree to which they accomplish the purpose for which they are being used (Worthen et al. 1993). There are three basic approaches to the validity of tests and measures as shown by Mason and Bramble (1989). These are content validity, construct validity and criterion-related validity. In this study, the researchers focus on content validity which can be defined as the degree to which items in an instrument represent the complete domain of items that would define a given construct (Springer et al. 2002). The instruments of this study were the questionnaires for nursing staff developed by the researchers. In order to determine the validity of these questionnaires, each question was reviewed based on feedback from three experts. The aspects of Islamic prayer were developed by the researchers from an Islamic perspective. The data were collected and pretested with 40 participants working at the Medical Centre University of Malaya and analysed using Statistical Package for Social Sciences (SPSS).

### Methods

#### Participants and Procedure

Three hundred (300) Muslim nursing staff were randomly selected from the Medical Centre University of Malaya to participate in this study. The sample represented different fields of study and ethnic groups. Their ages ranged from 21 to 50 years, and they participated voluntarily in this study. All respondents completed a questionnaire booklet containing three sections. Participants were assured that their responses would be kept confidential and utilised for the research purpose only. They were requested to complete the questionnaire by following the instructions found at the top of the questionnaire. Rapport was established by explaining the importance and relevance of the study.

#### Measures

##### Well-being

In this research, the major components of well-being are job satisfaction, family satisfaction, and life satisfaction. Family satisfaction was measured using three items developed by Hackman and Oldham (1975), and the Cronbach’s alpha was .68. Job satisfaction was measured using five items developed by Hackman and Oldham (1975), and the Cronbach’s alpha was .83. Life satisfaction was measured using five items developed by Diener et al. (1985), and the Cronbach’s alpha was .87.

##### Job stress

Job stress was measured using the workplace stress scale. It is a swift test to assess the job stress levels of the individuals. It was developed by the Marlin Company and the American Institute of Stress (The Marlin Company, North Haven, CT, and the American Institute of Stress 2009). This scale assesses the work stress based on one’s thinking about their current job. Workplace stress scale is comprised of eight statements describing how one feels in their job. The eight items are rated on a 5-point rating scale. The five responses in this scale are ‘never,’ ‘rarely,’ ‘sometimes,’ ‘often,’ and ‘very often.’ A sample item from the workplace scale is, “Conditions at work are unpleasant or sometimes even unsafe.”

##### Islamic Prayer

Islamic prayer consisted of 21 items, but the researchers removed five items based on the confirmatory factor analysis of the items. These variables were adopted from the Islamic perspective to examine its relationship with job stress and well-being. The sample items include “I perform daily prayers on time.” (Item-13) and “I believe that daily prayers keep me close to God” (Item-2). The scale uses a 5-point Likert response format, ranging from (1) “Strongly Disagree” to (5) “Strongly Agree”.

Table 1 presents the results of the reliability statistics and exploratory factor analysis. Most of the factor loadings for each instrument exceeded .50 thereby meeting the essentially...
significant level of convergent validity. Furthermore, the research instrument was tested for reliability using Cronbach’s coefficient, as reported in Table 1. Scale reliability greater than .70 is considered reliable (Hair et al. 1998). The Cronbach’s a-values for all dimensions ranged from .73 to .87, exceeding the minimum of .6 (Hair et al. 1998).

Many studies have shown that extracting factors on the basis of the Eigenvalues being bigger than 1 can lead to an overestimation of the number of retained factors (Henson and Roberts 2006). Accordingly, in this study, the Eigenvalues of the factors retained were greater than 1.9. This reduces the risk of over-factoring which implies that retaining factors that have little theoretical basis can lead to misinterpretation and they may not lead to replicability of results (Gorsuch 1983; Fabrigar et al. 1999; Henson and Roberts 2006). In multi-factor scales, when the total variance explained is between 40 and 60%, it is considered to be sufficient (Büyüköztürk 2007). Thus, the total variance explained by the scale is enough. The factor loadings found as a result of Varimax vertical rotation are presented in Table 1. In this case, factor 1 represents the maximum variance i.e. 20.76%, factor 2 (16.26%), and factor 3 (9.17%). However, retaining a one-factor solution can lead to under-factoring as it may cause considerable error (Wood et al. 1996). Furthermore, the percentage variance explained by factors was sufficient (46.20%). Table 1 shows that only three factors have been retained: the first factor Performing Prayer (F1), the second factor Prayer Concept (F2), and the third factor Prayer Impacts (F3).

Table 2 shows that there is a positive and significant correlation between Islamic prayer and well-being (r = .197, p = .000 < .01), Islamic prayer and age explained is between 40 and 60%, it is considered to be sufficient (Büyüköztürk 2007). Thus, the total variance explained by the scale is enough. The factor loadings found as a result of Varimax vertical rotation are presented in Table 1. In this case, factor 1 represents the maximum variance i.e. 20.76%, factor 2 (16.26%), and factor 3 (9.17%). However, retaining a one-factor solution can lead to under-factoring as it may cause considerable error (Wood et al. 1996). Furthermore, the percentage variance explained by factors was sufficient (46.20%). Table 1 shows that only three factors have been retained: the first factor Performing Prayer (F1), the second factor Prayer Concept (F2), and the third factor Prayer Impacts (F3).

Table 2 shows that there is a positive and significant correlation between Islamic prayer and well-being (r = .197, p = .000 < .01), Islamic prayer and age

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>F1</th>
<th>F3</th>
<th>F2</th>
<th>Alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>I perform dawn morning prayer (fajr) in the Mosque every day</td>
<td>.778</td>
<td>.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I perform all my prayers in the Mosque or congregation</td>
<td>.748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I make on-going effort to perform the voluntary prayer (nawafil)</td>
<td>.696</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I attend weekly Friday noon prayer at the Mosque</td>
<td>.628</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I invite others fellow Muslims to perform the obligatory prayer (solat)</td>
<td>.593</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I perform the prayer of need (al-hajah) whenever I am faced with difficulties</td>
<td>.582</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I perform daily prayers on time.</td>
<td>.500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I believe that life without prayer has no meaning/power.</td>
<td>.975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I believe that daily prayers keep me close to God</td>
<td>.975</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>I believe prayer makes me feel satisfied and happy</td>
<td>.787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I believe that prayer is the key to solving all sorts of life problems.</td>
<td>.743</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I feel relief from worries whenever I perform my prayer</td>
<td></td>
<td>.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I feel that God answers my supplications whenever I perform prayer</td>
<td></td>
<td>.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I feel as though my problems have been resolved whenever I perform prayer</td>
<td>.639</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I trust God to grant me my wishes whenever I perform prayer</td>
<td>.597</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I feel free and relaxed whenever I perform prayer</td>
<td>.539</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficient alpha (α) | .767 | .871 | .732 |
Eigen values | 4.359 | 3.415 | 1.926 |
% of variance (total = 46.20%) | 20.76% | 16.26% | 9.17% |

Table 2 Correlations between Islamic prayer, performing prayer, prayer concept, prayer impacts, and subjective well-being

<table>
<thead>
<tr>
<th>Scales/variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Islamic prayer</td>
<td>71.97</td>
<td>4.75</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Performing prayer</td>
<td>17.62</td>
<td>3.47</td>
<td>.902**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Prayer concept</td>
<td>16.00</td>
<td>.52</td>
<td>.171**</td>
<td>− .0.18</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Prayer impacts</td>
<td>23.19</td>
<td>1.37</td>
<td>.602**</td>
<td>.309**</td>
<td>.167**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Well-being</td>
<td>47.15</td>
<td>5.19</td>
<td>.197**</td>
<td>.223**</td>
<td>.019</td>
<td>.094</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Age</td>
<td>50.51</td>
<td>9.60</td>
<td>.100**</td>
<td>.075</td>
<td>.059</td>
<td>.112**</td>
<td>− .129**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Job stress</td>
<td>23.52</td>
<td>6.20</td>
<td>− .117*</td>
<td>− .078</td>
<td>− .112*</td>
<td>− .080</td>
<td>− .351**</td>
<td>.196**</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .05
**p < .01
(r = .100, p = .000 < .05), and job stress with age (r = .196, p = .000 < .01). Furthermore, there is a negative significant correlation between Islamic prayer and job stress (r = −.117, p = .000 < .05), well-being and job stress (r = −.351, p = .000 < .01), and well-being and age (r = −.129, p = .000 < .01).

Hierarchical regression analysis was used to test the hypothesis that Islamic prayer moderates the relationship between job stress and well-being. According to Rose et al. (2004), all variables were entered into the regression equation. In step one, job stress was entered, and this model was statistically significant, F = 6.778, p = .008 < .05, R = .166. In step two, Islamic prayer was entered, and the resulting model R was significantly greater than zero, F = 8.682, p = .001 < .05, R = .261. In step three, multiplications of Islamic prayer and job stress were entered, and subjective well-being was entered as a dependent variable, F = 7.919, p = .015 < .05, R = .302 (see Table 3). However, the stress * prayer interaction term explained a significant incremental portion of variance (Δ R² = .091, p < .05). The results of the moderator analyses are presented in Table 3. Results revealed that Islamic prayer strengthens the relationship between job stress and subjective well-being. Thus, Islamic prayer plays an important role as the moderator between job stress and subjective well-being of Muslim nurses.

In step one, job stress was entered, and this model was statistically significant F = 11.420, p = .000 < .05, R² = .039. In step two, age was entered, and the resulting model was significant because of p = .030 < .05, F = 6.287, and R² = .043. In step three, multiplications of age job stress were entered, and subjective well-being was entered as a dependent variable, F = 6.646, p = .008 < .05, R² = .067 (see Table 4). However, the stress * age interaction term explained a significant incremental portion of variance (ΔR² = .067, p < .05). The results of the moderator analyses are presented in Table 3. Results revealed that age strengthens the relationship between job stress and subjective well-being. Thus, age plays an important role as the moderator between job stress and subjective well-being of Muslim nurses.

### Discussion

The proper practice of worship in Islam is an effective tool for coping with life’s stresses (Taha 2006). Spiritual and religious behaviours such as prayer can reduce stress, anxiety, aggression, depression, obsession, and enhance and improve hope, mental health, well-being, quality of life and the ability to cope (Hosseini et al., 2013). Recent research on the relationship between prayer and stress has found that prayer is an effective way to reduce self-reported stress. It is reasonable to assert that prayer can reduce stress and anxiety (Schwartz, 2007). Most Malaysian employees consider religiosity an effective approach to well-being and reducing stress (Taha and Salama 2006). Researchers have identified numerous approaches, strategies, and techniques for effectively coping with stress and eliminating its effects. Also, Achour (2015) indicated that religious coping strategies contribute to a reduction and buffering of job stressors (Achour 2015).

Prayer is seen as the most practical religious strategy used to cope with stress in Muslim lives. It is expected to generate awareness of the divine presence in addition to intense reflection on the masterful grand design of creation and the universe which arguably provides a calming sense of scale with regards to reality. Prayer is one of the most fundamental obligations in the religious life of Muslims (Achour et al. 2014). Recent research on the relationship between prayer and stress has found that prayer is an effective way to reduce self-reported stress. Wiegand (2004) found that college students reported less state anxiety when they prayed before

<table>
<thead>
<tr>
<th>Variable</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job stress</td>
<td>.166</td>
<td>.028</td>
<td>6.778</td>
<td>2.689</td>
<td>.008</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Islamic prayer</td>
<td>.261</td>
<td>.068</td>
<td>8.682</td>
<td>3.257</td>
<td>.001</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job stress, prayer, stress*prayer</td>
<td>.302</td>
<td>.091</td>
<td>7.919</td>
<td>−2.455</td>
<td>.015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 1</th>
<th>R²</th>
<th>F</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job stress</td>
<td></td>
<td>11.420</td>
<td>3.713</td>
<td>.000</td>
</tr>
<tr>
<td>Age</td>
<td>.208</td>
<td>.043</td>
<td>5.287</td>
<td>.000</td>
</tr>
<tr>
<td>Job stress, age, stress*age</td>
<td>.260</td>
<td>.067</td>
<td>6.646</td>
<td>−2.662</td>
</tr>
</tbody>
</table>

**Dependent variable well-being**

*p < .05

**p < .01
completing a stressful task than they did when they did not pray before the task. Bormann et al. (2005) also found a connection between prayer and stress reduction. Some previous research has found that women frequently use prayer as a means to cope with daily stress (Mirola 1999).

Rauschenbach et al. (2012) addressed age differences in the experience of work-related stress. The findings revealed that age might affect several components of the stress process at work. However, as these effects are partly conflicting, they might nullify each other in the overall relationship between age and stress. According to Götz et al. (2018), there is a strong relationship for older workers because younger workers have possibly different motivations to work than older workers. For example, younger workers may face higher pressure to develop strong workplace relationships, and therefore, they are more likely to continue working compared to their older counterparts, even if conditions at work are poor. Furthermore, the reason as to why age also moderates the relationship between job stress and subjective well-being of the nurses is because the older one gets, the less stressed they will be (Diener et al. 1985). Also, Mahsa and Alireza (2014) found a significant negative and inverse relationship between age and job stress. As people age, they are more perseverent in facing difficulties in order to reach the highest state of spiritual and physical fitness (Achour et al. 2015).

Conclusion and Implications

This research focused on job stress and subjective well-being among Muslim female nurses working at the University of Malaya Medical Centre. It also highlighted the impact of prayer on reducing job stress. Job stress was found to have a significant and negative effect on the subjective well-being of nurses. In other words, job stress had a substantial impact on well-being. Persons with lowered well-being experienced high job stress. Furthermore, job stress has become the main problem for working women, including nurses. The current study highlights the importance of prayer and age as moderators on the relationship between job stress and well-being of nurses. In particular, younger nurses have placed greater value on mentally challenging and exciting work than their older colleagues. Notably, the younger nurses had greater concern for flexible hours of work, responsibility and autonomy, pleasant working conditions, and opportunities for creativity and originality.

Future research needs to address the use of prayer as a coping strategy with life problems and as a method to improve the well-being of nurses. This can also help determine the best strategy to cope with job stress to obtain the best productivity and better satisfaction with job, family, and life. Similarly, future research needs to study the effects of stress and the role of Islamic prayer in improving employee well-being. Hospital management should understand the needs and wants of nurses especially the benefits of increasing well-being and continually instilling awareness in employees regarding the importance of religiosity especially performing prayer. Hospital policy should provide nurses with the knowledge and the latest skills, methods, and strategies to cope with job stresses. Furthermore, more attention should be paid to the ability of younger nurses to handle problems related to job stress and high workload. The findings of this study recommend different stress management interventions for older and younger nurses.

Limitations

This study has focused on job stress and prayer from an Islamic perspective. It highlights the importance of prayer in reducing job stress and age for the well-being of Muslim nurses. This study is limited to nurses in one public hospital in a developing country. Thus, it would be more interesting if the study could be extended to other public and private institutions in a Muslim country. It would also be interesting if a comparison could be done between other religions.

Acknowledgments

The authors would like to thank Academy of Islamic Studies and University of Malaya for financial assistance to prepare this article. The grant provided to the authors under Research Project RP028B-16HNE is highly appreciated.

Compliance with Ethical Standards

Conflict of interest

The author declares no conflict of interest.

Ethical Approval

Ethical permission provided by Medical Ethics Committee, University Malaya Medical Centre, MECID.NO: 20148-476.

References


Razi, I. (1900). *Commentary on the Qur’an*, p. 432, Cairo.


