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To cite this article: P. Yukthamarani Permarupan, Abdullah Al Mamun, Naeem Hayat, Roselina Ahmad Saufi & Naresh Kumar Samy (2020): Effects of quality of work-life on emotional exhaustion: A study among nurses in Malaysia, Journal of Workplace Behavioral Health, DOI: [10.1080/15555240.2020.1720516](https://doi.org/10.1080/15555240.2020.1720516)

To link to this article: <https://doi.org/10.1080/15555240.2020.1720516>



Published online: 05 May 2020.



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Effects of quality of work-life on emotional exhaustion: A study among nurses in Malaysia

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ABSTRACT

This research aimed to check the curtailment of the emotional exhaustion among the staff nurses in Malaysia using the quality of work-life scale (QWL) at the workplace provided by the health care organizations. This research used self-reported adopted scales and collected data from 432 respondents analyzed with partial least square structural equation modeling (PLS-SEM). The results revealed that the social integration at work, social relevance of work, and work and total life span had significantly reduced the impact of emotional exhaustion among the nurses in Malaysia. The effects of the constitution at the work organization, the opportunity for growth and security, and work and life span can insignificantly affect the curtailment of emotional exhaustion. The results of the PLS-SEM importance-performance map analysis revealed that the most important four dimensions of QWL that influence the curtailment of emotional exhaustion were safe and healthy working conditions, social integration in the work organization, the social relevance of work, and constitution at the work organization. The managers of the health care industry must provide the necessary QWL attributes to address emotional exhaustion among nursing staff. By addressing the emotional exhaustion issue among the nursing staff, their work responsibilities and work performance can be enhanced.

ARTICLE HISTORY

Received 17 July 2019

Revised 27 November 2019

Accepted 19 January 2020

KEYWORDS

Emotional exhaustion;
Malaysia; nursing
professional; quality of
work-life

Introduction

The health care industry depends on medical doctors and nursing professionals to deliver necessary health services to their communities (Ahola & Hakanen, 2007). The quality and timely delivery of health care services is associated with a well-trained, skilled, and motivated workforce (Ahmad & Oranye, 2010). The achievement of the organizational performance is strategically linked with the use of motivated human resources and scholars have given much attention to correcting work performance by workforce motivation (Goh & Marimuthu, 2015). The quality of work-life (QWL) scale

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measures the achievement of workforce motivation as well as bringing in much-needed work performance in achieving organizational goals (Asgari & Dadashi, 2011). The implementation of QWL practices depends on the management of the organization and the rules and regulations set by the organization (Beh & Che Rose, 2007). Moreover, integrating QWL into the organizational environment has a positive impact on the workers' attitudes at their workplaces. QWL establishes the workers' values and uplifts the organizational culture as perceived by the workers (Walton, 1974).

However, the nursing staff is under continuous work stress due to the demanding nature of their work. This issue has led to reported burnout symptoms among the nursing staff which leads to distancing from work or work-related activities, lack of job interest, and nonperformance (Schaufeli, 2006). The provision of QWL can reduce the impact of burnout and its types (McVickar, 2003). Emotional exhaustion is a dimension of burnout and termed as a source of burnout. Hence, curbing emotional exhaustion by the QWL attributes needs a clear understanding of how each dimension of QWL effect emotional exhaustion (Christina & Leiter, 2016; Goh & Marimuthu, 2015). The provision of QWL attributes of the constitution at the work organization, opportunity for growth and security, and work and life span may reduce emotional exhaustion among the nursing staff in Malaysia (Tang & Tan, 2015). This study aims to signify the role of QWL attributes (constitution in the work organization, a safe and healthy work environment, the opportunity for growth and security, social integration in the work environment, work and life span, and social relevance of work-life) on curtailing emotional exhaustion among staff nurses. Moreover, it also clarifies which QWL attributes impact emotional exhaustion most.

The next section is about the literature on burnout, emotional exhaustion, and QWL factors. It also describes the method used to conduct the literature review and hypotheses development. The analysis and results are reported in the sections "Data analysis" and "Discussion," respectively. The "Conclusion" section speaks about the future research opportunities and study limitations.

Literature review

Burnout

Higher work demands in the workplace requires higher personal, physical and emotional efforts from the workers. The continuous higher demands can cause both physical and emotional drainage that can lead to stress, strain, and no interest in the work (Goh & Marimuthu, 2015). Higher work demands are associated with a new-age competitive work environment as well as a few professions, like nursing, that are regarded as a more

physically and emotionally demanding profession (Yiing & Ahmad, 2009). The worker's perceptions toward the demands of the workplace can cause the loss of personal interest in work and drain the psychological and physical resources, which is known as burnout (Christina & Leiter, 2016). Burnout can further cause the loss of work-related motivation and can contribute to an avoidance of work-related responsibilities (Khamisa, Peltzer, & Oldenburg, 2013). Burnout is associated with three domains, namely emotional exhaustion, depersonalization, and lower achievement orientation (Maslach, 2011). Emotional exhaustion is defined as the conception of personal, physical and emotional loss of resources in the workplace which can lead to tiredness and loss of emotional interest in work (Christina & Leiter, 2016; Khamisa et al., 2013; Long, Kowang, Ping, & Muthuveloo, 2014). Emotionally exhausted workers may avoid working, take no responsibility of their work and their practice with other workers and customers (Goh & Marimuthu, 2015). Moreover, the loss of purpose at the workplace is associated with the lack of interest in achievement orientation (Garrosa, Moreno-Jiménez, Rodríguez-Muñoz, & Rodríguez-Carvajal, 2011; Permarupan, Al-Mamun, & Saufi, 2013). Workers start putting less effort in at the workplace as performance and completing assigned tasks are irrelevant and unimportant to them (Maslach, 2011). Nursing professionals are reported to be highly disposed to burnout, which can lead to higher levels of distress among the staff nurses and low work engagement as well as leaving the health industry (Adriaenssens, De Gucht, & Maes, 2015).

Emotional exhaustion

Emotional exhaustion is the perceived shortage of emotional, personal resources of the worker (Maslach, 2011). The weakening of emotional resources can trigger fatigue and loss of work motivation (McVickar, 2003) at the personal and social level, as the worker will keep a distance from other workers (Adriaenssens et al., 2015). The lack of energy can drain personal emotional resources (Christina & Leiter, 2016). Emotional exhaustion is defined as the source of burnout, and the other two dimensions of burnout stem from emotional exhaustion (Long et al., 2014). It is important to control emotional exhaustion in enabling workers to perform better at the workplace.

QWL

Activity and performance achievement are the hallmarks of a professional worker's life. Organizations are regarded as vehicles of performance and achievements (McVickar, 2003). Necessary working conditions are required to enable the facilitating conditions for work performance and achievement orientation (Meng et al., 2015). The QWL is based on the

notion for the constitution of work framework, safe and healthy work environment, opportunity for growth and security, social integration in work environment, the social relevance of work-life, and work and total life span (Walton, 1974). QWL, based on the provision of these attributes, contributes to the worker's welfare, as well as to the workplace and in a larger context to the society (Orgambidez-Ramos & Borrego-Alés, 2014).

Constitution in the work organization

Work structure is the basic attribute of the work organization. Work structure enables the fixing of work responsibilities and work-related power for the smooth execution of delegated work roles (Spreitzer, 2008). The constitution at the workplace delineates the command and control system in facilitating appropriate working and work-related evaluation at the workplace (Siegal & McDonald, 2004). Constitution at the workplace also provides the work roles and associated work authorities for the execution of job responsibilities (Schaufeli, 2006). The constitution at the workplace is the source of clarity of work and work responsibilities as well as the proposed positive job outcomes (Meng et al., 2015). The related reward and outcomes are based on the well-drafted constitution of the workplace (Loemo, Admasu, & Mirkuzie, 2017). The impact of the constitution at the workplace can facilitate workers' understanding of the span of control and chain of command by having a positive impact on employees' perceptions about their job responsibilities (Yiing & Ahmad, 2009). The workers feel safer and have a good understanding of the work and work guidelines (Spreitzer, 2008).

A safe and healthy work environment

Workers require safe and healthy working conditions that can have a positive impact on their physical and psychological health (Walton, 1974). The physical safety at the workplace is related to the endowment of indispensable work safety (Beh & Che Rose, 2007) besides providing accurate and functioning work instruments to perform the delegated accomplishment of the assigned work in an appropriate manner (Permarupan et al., 2013). The psychological aspect of the work environment aligned for work safety (Schaufeli, 2006) is associated with the provision of the assigned work breaks and prearranged working hours by following government regulations (Orgambidez-Ramos & Borrego-Alés, 2014). The provision of safe and healthy working conditions can also be achieved through the use of protective clothing and instruments utilized with proper training (Siegal & McDonald, 2004).

Opportunity for growth and security

Growth and development are normal requirements in life. Workers must be provided with the opportunities for growth in skill levels and career growth (Walton, 1974). The provision of growth opportunities can positively impact the worker's mindset and harness the willingness to take an active part in work activities and responsibilities (Orgambídez-Ramos & Borrego-Alés, 2014). Learning opportunities, work-related training, and career development plans are a part of work life balance for any professional, including nursing professionals (Spreitzer, 2008). Another aspect of work-life is the security of the job for both physical and psychological levels (Loemo et al., 2017). Job security or a sense of security by the provision of the right working instruments can enable satisfaction, positively influencing the worker's willingness to perform (Siegal & McDonald, 2004).

Social integration in the work environment

A good work environment is associated with the provision of openness among the workers at the workplace, and workers can interact freely without reluctance in working together for organizational purposes (Permarupan et al., 2013). Organizational climate can promote social integration that enhances team orientation at the workplace in reducing work-related stress that leads to higher work performance (Siegal & McDonald, 2004). Social integration is an aspect of work-life quality (Schaufeli, 2006). Social integration coexists within the organization system as well as among people who practice the culture of sharing, caring, and working harmoniously.

The social relevance of work-life

Organizations have some social cause that drives them with financial or non-financial goals (Asgari & Dadashi, 2011; Schaufeli, 2006). Moreover, the organization differs based on its social relevance with social welfare. The social value measures the level of value for the social relevance of an organization to society. The higher social value of an organization can influence the higher positive perception of the workers in society. In general, nursing is a profession that has higher social values and relevance for society because it is a noble profession that serves the community (Orgambídez-Ramos & Borrego-Alés, 2014). However, the perception of social relevance is less in Malaysia when compared to developed countries (Ahmad & Oranye, 2010).

Work and total life span

Life is a mix of work and personal life. A good balance is a must for workers' welfare at work as well as in their personal lives (Long et al., 2014).

Social needs are an integral part of working life, and family is one of the important aspects of the worker's life span (Orgambídez-Ramos & Borrego-Alés, 2014). Moreover, the workers need a break during working hours as well as time to spend with their family and friends. Normal eight-hour work is enough, and working hours beyond eight hours per day has a negative impact on work and health (Schaufeli, 2006). It is reported that the nursing staff had fewer breaks and rest than other professionals (McVickar, 2003). The provision of work-life balance in work and personal life can have a positive impact on the health and work of the nursing staff (Walton, 1974).

The underlying theory used to explore this research is the job demands-resources (JD-R) theory (Bakker & Demerouti, 2014; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004), which is inspired by job design and job stress theories. Job design theories often ignore the role of job stressors or demands, whereas job stress models ignore the motivating potential of job resources. JD-R theory combines the two research traditions and explains how job demands and job and personal resources have unique and multiplicative effects on job stress and motivation. In addition, JD-R theory proposes reversed causal effects in which burned-out employees create more job demands over time for themselves and engaged workers mobilize their job resources to stay engaged (Bakker & Demerouti, 2014).

Hypotheses development

Constitution in the work organization and emotional exhaustion

A good workplace relies on an established work structure that defines the internal hierarchy and job roles to execute the assigned work responsibilities (Meng et al., 2015). The provision of work structure also establishes work-related power and predefined role accountabilities (Spreitzer, 2008). The provision of work structure and job roles with predefined job assessment enables smooth working conditions and the achievement of efficiency (Siegal & McDonald, 2004). Moreover, the workers feel secure by the provision of established work roles and systems of accountabilities. The issues of work overload and misuse of delegated power can check with the constitutional provision of the constitution in the work organization (Walton, 1974). The availability of the constitution at the workplace can reduce the stress level and make the workers feel more satisfied with their work (Orgambídez-Ramos & Borrego-Alés, 2014). The nursing staff's emotional exhaustion can be tackled with the provision of the constitution in the work organization. Therefore, this leads us to hypothesize the following:

Hypothesis 1 (H1): Constitution in the work organization has a negative and significant effect on emotional exhaustion.

Safe and healthy working conditions and emotional exhaustion

Workplace safety and healthy working conditions have a positive impact on workers' satisfaction (Asgari & Dadashi, 2011). Safety and healthy working conditions are separate and require different parameters to enable the perception of safe and healthy working conditions among the workers (Permarupan et al., 2013). Work layout, time table management, and management of workloads are attributes of workplace safety. Healthy working conditions are associated with the provision of work-related instruments that workers can use in the right manner (Schaufeli, 2006). These safe working conditions are related to curbing emotional exhaustion (Orgambidez-Ramos & Borrego-Alés, 2014). Moreover, managing one's workload and reduced work stress can help manage emotional exhaustion. Hence, the workers have personal capacities to work for the organization. Therefore, this leads us to hypothesize the following:

Hypothesis 2 (H2): Safe and healthy working conditions have a negative and significant effect on emotional exhaustion.

Opportunity for growth and security and emotional exhaustion

Security and growth are natural human needs, and they can impact work satisfaction and reduce stress and negative work perceptions (Beh & Che Rose, 2007). Opportunities for career growth are positively attached to job security (Garrosa et al., 2011). Opportunities for growth by work-related training and career progression plans can enhance the worker's capacities as well as positively impact emotional capacities (Goh & Marimuthu, 2015). Work-related training can formally or informally improve the emotional resources and reduce the impact of emotional exhaustion among the workers (Asgari & Dadashi, 2011). Moreover, job security is made available within the organization through lifelong employment and workers' health insurance; the employee benefits can positively impact the workers' perceptions toward the work and workplace (Orgambidez-Ramos & Borrego-Alés, 2014). Emotional exhaustion is reduced using the provision of growth opportunities and job security provided by the organization. Therefore, this leads us to hypothesize the following:

Hypothesis 3 (H3): Opportunity for growth and security have a negative and significant effect on emotional exhaustion.

Social integration and emotional exhaustion

Workplaces are known for their provision of social integration to the workers (Walton, 1974). A workplace that has high social integration provides the opportunity for the workers to enjoy and connect with their colleagues

(Beh & Che Rose, 2007). A workplace that entails respect and social attachments among the workers can impact the workers' perception toward the work (Ahmad & Oranye, 2010). The binding force among the workers enables responsibility-sharing and positive work division that can lead to healthy working relationships as well as influencing the workers' behaviors (Asgari & Dadashi, 2011). The workers perceived more attachment and regarded the workplace as socially safe and enriched concerning the family-like environment. Perceived social integration can reduce emotional exhaustion as the workers can share their thoughts and responsibilities (Orgambídez-Ramos & Borrego-Alés, 2014). Therefore, this leads us to hypothesize the following:

Hypothesis 4 (H4): Social integration in the work organization has a negative and significant effect on emotional exhaustion.

The social relevance of work-life and emotional exhaustion

Social relevance is associated with the perception of values toward the work as perceived by society. Social relevance has a positive influence on the perception of the worker toward the worker and working conditions (Asgari & Dadashi, 2011; Walton, 1974). Some of the features of social relevance for the QWL are the value of the profession in the society, perceived prestige of the organization as perceived by the community, and perception of the product and service quality (Meng et al., 2015). Social relevance curtailment of a profession can cause emotional exhaustion and the managers of the health care industry need to address the issue for the nursing staff (Schaufeli, 2006). The improved and enhanced social relevance of nursing professionals can reduce emotional exhaustion among the nursing staff (Orgambídez-Ramos & Borrego-Alés, 2014). Therefore, this leads us to hypothesize the following:

Hypothesis 5 (H5): Social relevance of work-life has a negative and significant effect on emotional exhaustion.

Work and total life span and emotional exhaustion

A balanced work-life requires workers to engage in work activities effectively (Walton, 1974). Work breaks and rest time during the work day can improve the quality of work as well as having a positive impact on workers' perceptions toward the work and work environment (Meng et al., 2015). The nature of nursing professionals is tedious, and they use more effort to perform the assigned job responsibilities effectively. Improved motivation and provision of the work and total life span can influence emotional exhaustion (Orgambídez-Ramos & Borrego-Alés, 2014). Work and life span

can impact emotional exhaustion among the nursing staff. Therefore, this leads us to hypothesize the following:

Hypothesis 6 (H6): Work and total life span have a negative and significant effect on emotional exhaustion.

Research methodology

Sample selection

G*Power V2.0 was used to calculate the sample size for this research with the statistical significance at 0.05 for the multiple regressions which have the statistical power of 0.95 with the medium effect size of 0.15 (Faul, Erdfelder, Lang, & Buchner, 2007). The G*Power calculation suggested the sample size of 129, which is rounded off to 130 samples. Moreover, this research utilized the Krejcie and Morgan (1970) table, and the required sample size was 378. This research retrieved the list of hospitals from the Malaysia Healthcare Travel Council (MHTC) website. The data were collected from 10 registered hospitals in Selangor and Kuala Lumpur with 1620 registered nurses. A total of 550 questionnaires were distributed in 10 hospitals after receiving permission from the chief matron of each hospital, and this study obtained 467 questionnaires for analysis. Upon final screening, 35 responses were incomplete or untrustworthy and hence were discarded. Therefore, only 432 final cases were used for the analysis.

Research instrument

This cross-sectional study employed reputable scales to collect the data from the prospective samples. The concept of the QWL was adopted with six subdimensions, namely a safe and healthy environment, the opportunity of growth and security, social integration in work environment, constitutionalism, total work-life space, and social relevance. In total, this research adopted 26 items from the Walton (1974) scale and the scale reliability was $\alpha = .87$ with 35 items. The estimation of depersonalization was performed using Maslach's Burnout Inventory with seven items for the subdomain of emotional exhaustion, and the reported reliability coefficient for the scale was $\alpha = 0.90$ for emotional exhaustion (Maslach, Jackson, & Leiter, 1996).

Common method variance

Measurement error happens in social science research as scales utilized for data collection from a single source at a single point of time that leads to common method variance (CMV), and it needs to be addressed by social

science researchers (Podsakoff, Mackenzie, & Podsakoff, 2012). Furthermore, the constructs of interest have a common variance with other related constructs within the research. The treatment of CMV was made at the pre-data collection, data collection, and analysis stage, respectively. This research adopted a scale from Walton (1974) and Maslach et al. (1996). Therefore, this research exploited Harman's single-factor analysis to estimate the CMV (Harman, 1976). Harman's single factor set is easy to perform as a diagnostic tool only. However, there is a wide acceptability of Harman's single factors test (Podsakoff et al., 2012). The recommended rule was the single factor must extract less than 40% variance to establish that CMV is not the issue for the study's constructs and results (Podsakoff et al., 2012). For this research, the results of the Harman single factors were extracted and accounted for 26.01%, which was less than the prescribed limit of 40%. It provides evidence that CMV is not a serious issue for this research.

Multivariate normality

In partial least square structural equation modeling (PLS-SEM), the multivariate normality was not a serious concern as the PLS-SEM is a non-parametric analysis tool (Hair, Ringle, & Sarstedt, 2013). This research followed the suggestion by Peng and Lai (2012) and checked the multivariate normality of the data set. This study used Web Power online tool (<https://webpower.psychstat.org/models/kurtosis/>) to measure multivariate normality. The web power online tool offered the results with skewness and kurtosis coefficients with the p value for the data set. The data was considered non-normal if the p value for the Mardia's multivariate coefficient is more than 0.05 (Cain, Zhang, & Yuan, 2017). The result suggested that our data were normally distributed.

Data analysis method

PLS-SEM is an analytical method that explores the influence of endogenous variables on latent constructs and can be used with non-normal data (Hair et al., 2013). By following the recommendation by Chin (2010), this research reported the PLS-SEM results in two stages. Cronbach's alpha (α), rho_A, and composite reliability (CR) were used to report the internal consistency for the constructs with the recommended score of Cronbach's alpha, rho_A, and CR of 0.70 or above. The average variance extracted (AVE) value must be 0.50 or above for every construct (Hair et al., 2013). The variance inflation factor represents the inflation of variance due to the presence of multicollinearity within the study constructs (Chin, 2010). The discriminant validity in PLS-SEM verified with cross-loading, Fornell-Larcker, and

Heterotrait–Monotrait ratio (HTMT). The Fornell–Larcker had met the cut-off values of 0.7 and the HTMT values were 0.9 (Henseler, Ringle, & Sarstedt, 2015). The second stage is about the measurement model in which r^2 denotes the explanation power of the endogenous variables with the exogenous variables. The effect size (f^2) and Q^2 are the estimates of the measurement model. The f^2 signifies the effect of each exogenous variable on the endogenous variable. Cohen (1988) offered guidelines to interpret the f^2 . The f^2 of 0.30, 0.15, and 0.02 represents large, medium, and small effects, respectively. The Q^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large predictive relevance of the model, respectively (Hair et al., 2013). The importance-performance map analysis (IPMA) describes the precursors that have relatively high to low importance for the endogenous construct in a study (Chin, 2010). This analysis identifies the potential area of improvements that need more attention from the management point of view and scholars. IPMA is an x - y plot that shows the importance, that is, the total effect on x -axis and performance of the factors on the y -axis using the scale of 0 to 100. IPMA centered on the total effect of rescaled variables scores in an unstandardized arrangement. Rescaling develops each latent variable score between the values of 0 and 100. The mean value of the latent variable score represents the performance of the latent variable, where 0 represents the least and 100 represents the most important in the performance of endogenous construct (Hair et al., 2013).

Data analysis

Descriptive statistics

Table 1 presents the respondents' profiles in this study. The majority of the study respondents were female (85%). A total of 86% of nurses were aged 31 years or older. It shows that nearly 14% of study respondents were aged younger than 30 years. Nearly 68% of the study respondents were married or at least married once, and the rest of them were single or not married. About 79% of the study respondents had graduate-level education and 2% of them had postgraduate-level education. Only 19% of the nurses had certificate-level education. There were only 2% of the respondents who had less than 2 years of work experience; 40% have working experience of 2 to 5 years. A total of 35.6% of the respondents have worked for 6 to 10 years, and about 21% of them have more than 10 years of working experience.

Validity and reliability

As deliberated before, this research monitored the endorsement posited by Hair et al. (2013). Cronbach's α , rho_A, and CR for each construct are more

than 0.961, 0.859, and 0.972, respectively. The Cronbach's α value is the measure of the inter-correlational approximation of the items for each construct. This value illustrates that 0.841 is the minimum value and the other constructs have values above the prescribed limit of 0.70 (see [Table 2](#)). Moreover, the rho_A values for the study construct are in the range from 0.859 to 0.966. The Cronbach's α and CR values revealed that the constructs were reliable and performed well for the next analysis. The AVE values for all items for each construct must be above 0.50 to achieve the convergent validity to approve the unidimensionality for each construct (Hair et al., 2013). Items display that the constructs have acceptable convergent validity. It is important to verify the loading for every item and cross-loading to confirm the discriminant validity. The results show that the item loads on their particular variable fulfill the postulation of discriminant validity. [Table 3](#) shows the results in which the item loading is on its construct and shown in italic. If an item loads more on another construct, its construct should be dropped (Hair et al., 2013). Another test for discriminant validity is checking the Fornell–Larcker criterion. The results show that the values are within the acceptable range (Henseler et al., 2015). Another recommended examination for discriminant validity is HTMT

Table 1. Profile of the respondents.

	<i>n</i>	%
Gender		
Male	65	15.0
Female	377	85.0
Total	432	100.0
Education		
Certificate	82	19.0
Degree	341	78.9
Master's	9	2.1
Total	432	100.0
Working experience (years)		
Less than 2	11	2.5
2–5	174	40.3
6–10	154	35.6
11–15	47	10.9
16–20	46	10.6
Total	432	100.0
Age (years)		
Younger than 30	57	13.2
31–41	228	52.8
42–52	95	22.0
53 and older	52	12.0
Total	432	100.0
Marital status		
Single	139	32.2
Married	249	57.6
Divorced	42	9.7
Widowed	2	0.5
Total	432	100.0
Nationality		
Malaysian	315	72.9
Non-Malaysian	117	28.1
Total	432	100.0

ratio. Another recommended examination for discriminant validity is Heterotrait–Monotrait (HTMT) ratios, which must be 0.90 or less to get the confirmation that the discriminant validity established for the study (Chin, 2010). The results in Table 3 show that the study has evidence of discriminant validity.

Path analysis

After the analysis of the model for its validity and reliability, the next step is the analysis on the impact of the constitution in the work organization, safe and healthy working condition, the opportunity for growth and security, social integration in the work organization, the social relevance of work-life, and work and life span on emotional exhaustion. The adjusted r^2 value for the six input variables (i.e., constitution in the work organization; safe and healthy working condition; opportunity for growth and security; social integration in the work organization; social relevance of work-life; and work and life span) on emotional exhaustion revealed that the 37.5% of variance in emotional exhaustion can be explained by the six input variables of QWL. The Q^2 value for the part of the model is the 0.249, indicating a small predictive relevance (Chin, 2010).

The standardized path coefficients, t values, and significance level are presented in Table 4. The path coefficient from the constitution in the work organization on emotional exhaustion is $\beta = -0.089$ and $p = 0.098$, indicating a negative and insignificant effect on the constitution of the work organization on emotional exhaustion. The result demonstrates that H1 is not supported. The path coefficient for safe and healthy working conditions for emotional exhaustion is $\beta = -0.032$ and $p = 0.273$. The result shows that the effect of safe and healthy working conditions on emotional exhaustion is negative and insignificant; thus, it provides no support for H2. The path coefficient of the opportunity for growth and security on emotional exhaustion is $\beta = -0.043$ and

Table 2. Reliability analysis.

Variables	Number of items	Cronbach's alpha	Composite reliability	rho-A	Average variance extracted	Variance inflation factor
Constitution in the work organization	4	0.961	0.972	0.966	0.896	2.855
Safe and healthy working condition	6	0.841	0.890	0.929	0.613	1.565
Opportunity of growth and security	4	0.859	0.906	0.859	0.708	2.733
Social integration in the work organization	4	0.884	0.921	0.885	0.743	2.287
Social relevance of work-life	5	0.906	0.931	0.923	0.731	1.813
Work and life span	3	0.854	0.910	0.897	0.772	2.050
Emotional exhaustion	7	0.961	0.945	0.950	0.714	–

Table 3. Outer loading and cross loadings.

	CWO	SHW	OGS	SIW	SRW	WLS	EMX
CWO Item-1	<i>0.950</i>	0.404	0.662	0.559	0.568	0.635	-0.539
CWO Item-2	<i>0.951</i>	0.447	0.679	0.564	0.572	0.693	-0.452
CWO Item-3	<i>0.947</i>	0.487	0.573	0.561	0.565	0.583	-0.483
CWO Item-4	<i>0.937</i>	0.390	0.593	0.545	0.555	0.615	-0.474
SHW Item-1	0.076	<i>0.785</i>	0.264	-0.021	-0.023	0.023	-0.033
SHW Item-2	0.520	<i>0.706</i>	0.406	0.424	0.422	0.418	-0.161
SHW Item-3	0.414	<i>0.924</i>	0.244	0.255	0.252	0.318	-0.063
SHW Item-4	0.397	<i>0.909</i>	0.306	0.457	0.449	0.178	-0.361
SHW Item-5	0.312	<i>0.936</i>	0.286	0.478	0.468	0.046	-0.370
SHW Item-6	0.357	<i>0.765</i>	0.295	0.488	0.480	0.081	-0.369
OGS Item-1	0.611	0.488	<i>0.904</i>	0.440	0.474	0.544	-0.378
OGS Item-2	0.617	0.440	<i>0.905</i>	0.254	0.468	0.572	-0.413
OGS Item-3	0.625	0.254	<i>0.816</i>	0.416	0.308	0.604	-0.400
OGS Item-4	0.368	0.416	<i>0.726</i>	0.065	0.366	0.284	-0.400
SIW Item-1	0.513	0.301	0.488	<i>0.849</i>	0.319	0.331	-0.389
SIW Item-2	0.501	0.238	0.440	<i>0.880</i>	0.462	0.411	-0.396
SIW Item-3	0.531	0.351	0.254	<i>0.898</i>	0.493	0.385	-0.442
SIW Item-4	0.640	0.334	0.416	<i>0.820</i>	0.526	0.570	-0.324
SRW Item-1	0.387	0.450	0.360	0.361	<i>0.858</i>	0.178	-0.464
SRW Item-2	0.479	0.449	0.423	0.425	<i>0.912</i>	0.275	-0.468
SRW Item-3	0.478	0.344	0.411	0.415	<i>0.911</i>	0.336	-0.395
SRW Item-4	0.621	0.450	0.511	0.515	<i>0.876</i>	0.507	-0.421
SRW Item-5	0.610	0.449	0.539	0.546	<i>0.699</i>	0.178	-0.308
WLS Item-1	0.601	0.192	0.415	0.425	0.401	<i>0.910</i>	-0.451
WLS Item-2	0.617	0.280	0.413	0.421	0.372	<i>0.926</i>	-0.420
WLS Item-3	0.540	0.083	0.470	0.479	0.291	<i>0.795</i>	-0.279
EMX Item-1	-0.544	-0.322	-0.488	-0.491	-0.515	-0.517	<i>0.921</i>
EMX Item-2	-0.425	-0.277	-0.412	-0.485	-0.472	-0.317	<i>0.857</i>
EMX Item-3	0.502	-0.262	-0.468	-0.532	0.448	-0.482	<i>0.905</i>
EMX Item-4	-0.289	-0.207	-0.298	-0.340	-0.357	-0.175	<i>0.711</i>
EMX Item-5	-0.300	-0.286	-0.266	-0.262	-0.394	-0.308	<i>0.848</i>
EMX Item-6	-0.392	-0.239	-0.345	-0.380	-0.390	-0.368	<i>0.720</i>
EMX Item-7	-0.516	-0.335	-0.460	-0.262	-0.462	0.469	<i>0.923</i>
Fornell-Larcker criterion							
CWO	0.947						
SHW	0.456	0.783					
OGS	0.663	0.476	0.841				
SIW	0.634	0.357	0.701	0.862			
SRW	0.597	0.497	0.482	0.522	0.855		
WLS	0.667	0.223	0.598	0.492	0.410	0.879	
DEP	-0.517	-0.329	-0.475	-0.513	-0.519	-0.448	0.845
Heterotrait-Monotrait ratios							
CWO	-						
SHW	0.516	-					
OGS	0.729	0.586	-				
SIW	0.685	0.467	0.803	-			
SRW	0.647	0.573	0.565	0.593	-		
WLS	0.735	0.302	0.710	0.578	0.462	-	
EMX	0.530	0.350	0.518	0.552	0.555	0.468	-

CWO = constitution in the work organization; SHW = safe and healthy working condition; OGS = opportunity of growth and security; SIW = social integration in the work organization; SRW = social relevance of work-life; WLS = work and life span; EMX = emotional exhaustion.

Italic values are the item loading and other values are cross loading.

$p = 0.266$, depicting that the effect of the opportunity for growth and security on emotional exhaustion is negative and insignificant; hence, it provides no support for H3. The path coefficient for social integration in the work organization on emotional exhaustion is $\beta = -0.206$ and $p = 0.000$, depicting that the effect of social integration in the work organization on emotional exhaustion is

Table 4. Hypothesis testing.

Hypothesis	Coefficient	<i>t</i> values	Significance	<i>r</i> ²	<i>f</i> ²	Decision
H1	CWO → EMX	−0.089	1.295	0.098		Not supported
H2	SHW → EMX	−0.032	0.604	0.273		Not supported
H3	OGS → EMX	−0.043	0.626	0.266		Not supported
H4	SIW → EMX	−0.206	3.332	0.000		Supported
H5	SRW → EMX	−0.261	4.246	0.000	0.375	Supported
H6	WLS → EMX	−0.148	2.496	0.006		Supported

CWO = constitution in the work organization; SHW = safe and healthy working condition; OGS = opportunity of growth and security; SIW = social integration in the work organization; SRW = social relevance of work-life; WLS = work and life span; EMX = emotional exhaustion.

negative and significant; it provides support for H4. The path coefficient for the social relevance of work-life on emotional exhaustion is $\beta = -0.261$ and $p = 0.000$, depicting the effect for the social relevance of work-life on emotional exhaustion as negative and significant; it provides support for H5. The path coefficient for work life span on emotional exhaustion is $\beta = -0.148$ and $p = 0.006$, depicting the effect for the social relevance of work-life on emotional exhaustion as negative and significant; it provides support for H6. Table 4 shows the results of path coefficients.

Table 5 presents the standardized path coefficients, *t* values, and significance level for each hypothesis that controls the effect of the respondent's age, gender, and education level. The findings in Table 6 are almost identical to the results in Table 4, for the effect of age, gender, and education level on standardized path coefficients, *t* values, and the significance level for each hypothesis is minimal.

Importance-performance factors

Table 6 presents the results of the importance-performance matrix in which safe and healthy working conditions is the most important factor in the performance of emotional exhaustion with a score of 70.76, followed by social relevance of work-life with a score of 68.653. The third most important factor in the performance of emotional exhaustion is the opportunity for growth and security with a score of 67.168. The fourth most important factor in the management of emotional exhaustion is the constitution in the work organization with a score of 63.901. The fifth most important factor for emotional exhaustion is the social integration in the work organization with a score of 54.237. The work and life span impacts the emotional exhaustion is the sixth most important factor in the management of emotional exhaustion with a score of 54.097. Moreover, the results show that the most important factors impacting emotional exhaustion are social relevance of work-life (total effect = -0.635), followed by social integration in the work organization (total effect = -0.360), work and life span (total effect = -0.174), constitution in the work organization (total effect =

−0.125), the opportunity of growth and security (total effect = −0.063), and safe and healthy working condition for curbing emotional exhaustion (total effect = −0.052; see Table 6).

Discussion

This study provided answers for the curtailment of the burnout process in the nursing profession. Emotional exhaustion could be negatively and significantly affected by social integration in the work organization, social relevance of work-life, and work and life span. This statement indicates that the nurses in Malaysia are feeling charged with these factors in QWL. Therefore, this research accepted H4, H5, and H6. The most important factor that influences emotional exhaustion is the social relevance of work-life ($f^2 = 0.061$) with a small effect, followed by social integration in the work organization ($f^2 = 0.030$) with a small effect size, and the third most influencing factor is work and life span ($f^2 = 0.017$) with a small effect size (see Table 4). However, the constitution at the workplace, opportunity for growth and security, and healthy and safe working conditions have an insignificant effect on emotional exhaustion. Hence, this research rejected H1, H2, and H3.

The results of the importance-performance matrix show that the most important contributing factor in the management of emotional exhaustion is safe and healthy working conditions, followed by social relevance of work-life, and opportunity for growth and security. In controlling emotional exhaustion among nurses, health industry management needs to focus on the provision of safe and healthy working conditions to reduce the impact of emotional exhaustion. The management of health care industries needs to

Table 5. Hypothesis testing—controlling the effect of age, gender, and education level.

Hypothesis	Coefficient	<i>t</i> values	Significance	r^2	f^2	Decision
H1 CWO → EMX	−0.093	1.460	0.145		0.005	Not supported
H2 SHW → EMX	−0.034	0.622	0.534		0.001	Not supported
H3 OGS → EMX	−0.022	0.353	0.724		0.000	Not supported
H4 SIW → EMX	−0.206	3.348	0.001		0.032	Supported
H5 SRW → EMX	−0.231	3.752	0.000	0.408	0.047	Supported
H6 WLS → EMX	−0.172	3.149	0.002		0.024	Supported

CWO = constitution in the work organization; SHW = safe and healthy working condition; OGS = opportunity of growth and security; SIW = social integration in the work organization; SRW = social relevance of work-life; WLS = work and life span; EMX = emotional exhaustion.

Table 6. Importance-performance matrix.

Factors of quality of work-life	Performance	Importance	Rank
Constitution in the work organization	63.901	−0.125	4
Safe and healthy working condition	70.760	−0.052	6
Opportunity of growth and security	67.168	−0.063	5
Social integration in the work organization	54.237	−0.360	2
Social relevance of work-life	68.653	−0.635	1
Work and life span	54.097	−0.174	3

address the issue of making the social relevance of work-life among nursing staff. This effort can reduce the impact of emotional exhaustion. Moreover, the nursing staff's emotional exhaustion can be tackled by the provision of the constitution in the work organization. The structure and operational regulations at the workplace can reduce the effects of emotional exhaustion. The QWL factors, namely work and life span, as well as social integration in the work organization, are the least important for the management of emotional exhaustion among the nursing staff.

Conclusion

The health care industry provides basic health-related services, and the role of the nursing staff is the most important in the execution of health services as they work with the medical doctors. The demanding nature of the nursing job, as well as tiring interactions with patients and caretakers, contributes to nurses feeling stressed and fatigued (Permarupan et al., 2013). Emotional exhaustion can be tackled positively using the attributes of QWL, namely the constitution at the work organization, safe and healthy working conditions, the opportunity for growth and security, social integration at the workplace, the social relevance of work, and work and life span (Orgambidez-Ramos & Borrego-Alés, 2014). Effective provision of QWL can reduce the negative effect of emotional exhaustion.

The results show that emotional exhaustion can be managed by the provision of QWL attributes, namely safe and healthy working conditions, social integration at the workplace, and social relevance of work. The effect of social relevance toward work-life on emotional exhaustion is the most important factor. Moreover, social integration in the work organization is the second most important factor, and the third factor that can reduce the effect of depersonalization is a safe and healthy working condition.

The management of the health care industry must take necessary actions to reduce the effects of emotional exhaustion by integrating QWL in the workplace (Schaufeli, 2006). The most important factor that addresses emotional exhaustion is safe and healthy working conditions, followed by the social relevance of work life. A safe and secure workplace brings the necessary encouragement for the workers to feel safe and secure. Then, they will start taking responsibility for work as social relevance improves the worker's psychological conditions. The factors of QWL can reduce emotional exhaustion for the nursing staff to work better. Moreover, the third most important factor that can address emotional exhaustion among nursing staff is the opportunity for growth and security.

Management of the health services industry can reduce emotional exhaustion by implementing accurate policy-making and work constitution

(Loemo et al., 2017). The provision of QWL dimensions, namely social integration in the work organization, the social relevance of work, and work and life span, are among the most important factors that can address emotional exhaustion among staff nurses. The provision of social integration in the work organization enables the nursing staff to become a part of the work-family as well as understanding the norm and practices of the workplace (Goh & Marimuthu, 2015). Moreover, close interaction with workers can encourage friendship, and they can teach and learn from each other (Beh & Che Rose, 2007). The health industry managers need to promote social relevance among the nursing staff. The health industry and society need to appreciate the nursing staff in public for their invaluable work (Adriaenssens et al., 2015). Health care industry management also needs to address the issue of work and life span to provide more structured timetables to eliminate the issues of overtime, overworked employees, and fatigue in reducing emotional exhaustion.

This research has three customary limitations. First, the nature of this research is cross-sectional and it measures behaviour at one point of time, which may lead to bias in the results. Future research can consider utilizing a longitudinal research method. Moreover, this research used six attributes of QWL to study their impacts on emotional exhaustion. Future studies may incorporate personal factors of the nursing staff that may impact emotional exhaustion such as age, marital status, and working experience. Besides that, this research is quantitative, where the impact was measured. Future research can include more explorative study methods such as interviews or observation to fully explore emotional exhaustion among the nursing staff and how to address the issue using the provision of QWL.

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