



Professional quality of life of health science educators in Saudi Arabia: A cross-sectional study

Gao Hua¹, Jestoni D. Maniago^{2*}, Melanie Reboldera³, Christian Jay S. Orte⁴, Brian A. Vasquez⁵, Ryan Michael Oducado⁶, Hanan Al-Harbi⁷

¹MSN, RN, Guangzhou Health Science College, 512743162@qq.com, +86 18802059110, ORCID No. 0009-0004-9859-2952

²EdD, DNSc, RN, RM, School of Nursing, College of Health Sciences, University of Nizwa, 616, Sultanate of Oman, College of Nursing and Allied Health Sciences, St. Paul University Manila, 1004, Philippines, jestoni@unizwa.edu.om, +968 7948 2831, ORCID No. 0000-0002-8603-3094

³PhDNSc, DNSc, RN, College of Nursing, King Faisal University, Kingdom of Saudi Arabia, madolfo@kfu.edu.sa +966 56 138 2963, ORCID No. 0000-0001-5023-986X

⁴PhD, RN, College of Nursing and Midwifery, Bataan Peninsula State University, Philippines, The Graduate School, Our Lady of Fatima University, Philippines, jay_serafica19@yahoo.com, +63 928 799 6234, ORCID No. 0000-0002-7230-9491

⁵PhD, RN, Department of Nursing, College of Applied Medical Sciences, Majmaah University, 11952, Kingdom of Saudi Arabia, b.vasquez@mu.edu.sa, ORCID No. 0000-0003-3349-6543

⁶PhD, RN, RGC, West Visayas State University, Philippines, rmoducado@wvsu.edu.ph, +63 919 515 1788, ORCID No. 0000-0001-9107-3069

⁷PhD, RN, College of Nursing, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia, Kingdom of Saudi Arabia, hfalharbi@pnu.edu.sa, ORCID No. 0000-0003-2500-6700

*Corresponding Author: Jestoni D. Maniago

*Email: jestoni@unizwa.edu.om

Citation: Jestoni D. Maniago et al. (2024). Professional quality of life of health science educators in Saudi Arabia: A cross-sectional study, *Educational Administration: Theory and Practice*, 30(1), 6677-6685

Doi: 10.53555/kuey.v30i1.9907

ARTICLE INFO

ABSTRACT

Aim: To examine the relationship between the demographic variables and professional quality of life among health science faculty members in select colleges in Saudi Arabia.

Design: A cross-sectional study

Methods: Data from 385 health science educators across 5 select colleges in Saudi Arabia were collected via an online survey using the Professional Quality of Life (ProQOL) Scale Version 5 and demographic data.

Results: At the univariate level, there is a significant difference on compassion satisfaction, burnout, and secondary traumatic stress in gender ($p=.000$, $p=.000$, $p=.000$); civil status ($p=.000$, $p=.000$, $p=.000$); highest educational attainment ($p=.000$, $p=.000$, $p=.000$); and years in service ($p=.000$, $p=.000$, $p=.000$) except in the academic position (significantly different for burnout, $p=.005$) of health science educators in Saudi Arabia. Those with PhD have higher compassion satisfaction score compared to Lecturers and followed by Post Doctorate.

Keywords: faculty members, health science, quality of life, Saudi Arabia, stress

INTRODUCTION

Working as a faculty member involves the use of physical, mental, emotional and social skills at the same time when dealing with university stakeholders, most importantly during the teaching-learning process (Farber, 2019; Breeman et al., 2015; Maniago et al., 2020; Miao et al., 2017). Faculty members absorb stress from the preparation of learning materials, delivery of instruction, classroom management and other student concerns that needs intervention. Apart from instruction, faculty members are also obliged to perform other administrative tasks including participation to various committees and involvement to academic accreditation. They also need to conduct and publish research and involve themselves in community programs of the university. These complex roles made some faculty members develop their commitment towards the organizational goals, and some perceive these roles as source of burnout and dissatisfaction (Farber et al., 2020; Maniago & Alamri, 2019).

The joy and other positive feelings that a person may derive from serving others is called compassion satisfaction, and contrasts to this kind of feeling pertains to compassion fatigue. There are several studies conducted discussing the prevalence of compassion satisfaction and compassion fatigue among members of

the healthcare team. Most of these studies were concentrated on hospital-based settings where phasing is fast such as emergency room, medical-surgical, and other critical care units. However, it's very rare that a study was conducted to measure prevalence of compassion satisfaction and compassion fatigue among university faculty members and examine its relationship to demographic variables.

The main reason that put this study into more interest is to develop a stress management plan and recommendation which may contribute to faculty personnel management or college-based policy that will improve the professional quality of life of faculty members.

Objectives of the study

This study aimed to examine the relationship between the demographic variables and professional quality of life among health science faculty members in select colleges in Saudi Arabia.

Background

Compassion Satisfaction. Compassion satisfaction as the pleasure derived from being able to do one's work or assigned tasks. This pertains to the pleasure of helping others while doing the work. The positive feelings toward colleagues, the ability to contribute to work setting and the good feedback from society or people being served, generally describe compassion satisfaction. In simple terms, it's the positive feeling of helping (Hundall Stamm, 2009).

Faculty members may gain self-fulfillment and happiness through their role which may significantly affect the level of their compassion satisfaction. They may also find this job as source of compassion fatigue and career dissatisfaction.

In addition, losing experienced and skilled employees and hiring new employees could be costlier for a company. Making sure that employees are satisfied is the best way to keep them and prevent them from quitting their job. She recommended five steps to increase compassion satisfaction at workplace. First, creating a positive work environment by surveying employee's needs, and physically improving the workplace. Second, paying employees according to industry standards. Compensating employees with less money than counterpart industry may lead to dissatisfaction and discouragement at work. Third, giving of rewards and promotions through positive feedback, and holding small events to recognize employees' effort can have a big impact. Fourth, provision of training and advancement opportunities to improve employee's skills. Lastly, engaging employees by considering their creativity, suggestions, and idea for improvements (Magloff, 2015). Relatively, the feeling of job enjoyment reflects compassion satisfaction at workplace. Previous studies suggest that happier healthcare workers produce better output and care to patients. The five steps to increase compassion satisfaction in workplace are applicable in any organizations including the college of applied medical sciences (Magloff, 2015).

Compassion Fatigue. Compassion fatigue refers to the gradual lessening of compassion over time. Individuals who work directly with trauma victims such as nurses, therapist, first aiders, psychologists and other people who helps out commonly experience this feeling which in turns affect one's behavior and performance at work. This term was first used among nurses in 1950s who were observed of several symptoms such as hopelessness, decrease motivation, stress and anxiety, sleepiness and manifestation of negative attitude. In addition, affected individual may show decrease in productivity and self-confidence at work, inability to focus and even quitting a job (Abendroth, 2011).

In relevance to the proposed study, faculty members are also prone to experience the symptoms and feeling of compassion fatigue. This is expected among them considering the nature of their job. Their involvement to stressful events may affect one's behavior and performance at work.

The presence of compassion fatigue is a state of acquiring negative feelings after helping the victims. Extreme tension and preoccupation with the suffering of others can be observed to the point that it creates secondary traumatic stress for the helper. Caregivers including nurses may develop a preoccupation with their patients by re-experiencing their trauma and may develop signs of anxiety as a form of secondary trauma. Caring too much can hurt and may lead to destructive behavior. Learning to recognize and manage its symptoms is the first step to overcome this condition (Campbell, 2006).

In addition, compassion fatigue was described as a unique form of burnout from chronic exposure to stressful hospital environment such as during emergency. Caregivers including nurses experiencing compassion fatigue may manifest irritability, sudden outburst of anger, reduced capacity and lack of interest to empathize with patients. Compassion fatigue was described as, the loss of ability to nurture. Aside from common symptoms, somatic pains are also noted among nurses such as headaches, insomnia and gastrointestinal distress. In general, compassion fatigue has a more sudden onset than burnout which gradually wears down the effectiveness and positivity of nurses (Schupp, 2015).

Faculty members facilitate student's learning better when they become more compassionate and draw closer to their learners. By being more compassionate, faculty members gain deeper understanding of their student's concern and act more decisively to teach them. However, being more compassionate may expose them to more severe stress and in return, they may tend to feel more exhausted. This is the point where symptoms of compassion fatigue take in and the lack of ability to nurture can be observed.

People who are attracted to care giving have higher chance to experience compassion fatigue (Gentry & Baranowsky, 2013). A concept known as Gentry Labels emphasized that there are people who are taught at an early age to care for the needs of others before caring for their own needs and thus making them attracted to enter professions related to caring. He proposed that heightened awareness is important to manage and relieve one's symptoms and behaviors.

Relatively, emotional involvement of nurses to patients under stressful situations is the key contributor in the development of compassion fatigue (Garcia & Maniago, 2018; Maniago, 2015; Maniago & Albougami, 2020). This emotional state affects nurses' self-confidence and productivity at work. How compassion fatigue was described on the excerpt articles like feeling of hopelessness and burnout will also be asked on the Professional Quality of Life (ProQOL) scale, the survey instrument which was used in this study.

Level of Burnout. Burnout is related to chronic exposure to work related stressors, rather than exposure to specific patient's scenario such as trauma. In business concept, the term burnout refers to a less serious state where staff tends to be disengaged and demotivated in their job roles. In psychology, burnout may not be a simple result of long hours at work, but this might be an underlying feeling of depression (Carter, 2013). In addition, there are three phases of burnout namely: emotional exhaustion, depersonalization and losing one's sense of personal accomplishment (Conrad, 2006). Emotional exhaustion includes symptoms of negative attitude, lack of physical energy, demotivation and gradual loss of sympathy and empathy with others. Depersonalization involves blaming of work itself and disappointments when emergency situation comes in. These negative attitudes serve as coping mechanisms to justify the feelings of powerlessness and hopelessness to the situation. Lastly, the third phase which is loss of personal accomplishments happens when burnout affects the person's desire to continue the work or is not satisfied at all.

Relatively, faculty members teaching in applied medical science courses are one of the professions with high levels of burnout. Professions which involve human interaction and services are prone to burnout due to stressful environment and greater emotional demands. This proposed study will assess burnout as one of the scale components of compassion fatigue among faculty members of applied medical sciences.

Level of Secondary Traumatic Stress. Secondary traumatic stress (STS) is an emotional state that results when an individual see, hear and exposed to firsthand trauma experiences by others. The symptoms of secondary traumatic stress (STS) are similar with post-traumatic stress disorder (PTSD) but lighter in nature. Post-traumatic stress disorder (PTSD) is experienced by victims of trauma while secondary traumatic stress (STS) is experienced by people who help and care for the victims of trauma. Aside from nurses, other professions that are commonly affected by secondary traumatic stress are psychotherapist, teachers, hospice workers, mental health counselors, social workers, journalist, physicians, judges, veterans and those whose service involves interaction to distressed clients. Several symptoms are associated to this like hopelessness, anger, irritability, poor concentration, isolation, emotional exhaustion, shame, physical illness and absenteeism. It was suggested that quantity and quality of staff member's work may be compromised if they have been secondarily traumatized and do not receive support or assistance.

Another study conducted explained the role of empathy as caused of secondary traumatic stress. Empathy is a vital component of effective therapeutic relationship which nurses, doctors and health workers use when dealing with patients and traumatized victims. In order to deliver empathy, it needs constructive behaviors and emotional engagement of helpers or caregivers. Witnessing the situation, listening to narratives and handling the traumatized victim, exposes helpers and caregivers to stress which literally tag them as, stress absorbers. However, it was noticed that lack of empathy and detachment from emotional engagement with patients could be beneficial to protect against burnout and secondary traumatic stress (Huggard, 2003).

METHODOLOGY

Methods and Techniques of the Study. The present study utilized the descriptive cross-sectional design. According to Babbie (2020), descriptive cross-sectional method is a fact-finding technique in research that is widely accepted. It is a useful means of adequate data gathering, analyzing and accurate interpretation of findings. The main purpose of this method is to describe a certain condition or phenomena at a given time period and area of concerns.

Relatively, this method is appropriate to this study since it aims to examine the relationship between the demographics and professional quality of life among faculty members of applied medical sciences. The technique is the normative survey approach and evaluation where respondents need to answer a questionnaire. This is commonly used to explore opinions and perceptions of respondents which can represent the whole population. The survey questionnaire is appropriate in this study because it enables the gathering of data and formulation of generalizations. At the same time, survey questionnaire is a reliable source of first-hand information because respondents directly write and provide the answers.

Sample of the Study. A total of 385 health science educators from 5 colleges in Saudi Arabia were selected using a simple random sampling strategy. A priori power analysis was performed to determine the actual sample size for the study using the following parameters: medium effect size = 0.25; significance level = 0.05;

and statistical power = 0.80 using the G* Power 3 software. Polit and Beck (2012) claim that most of the nursing studies cannot expect effect sizes in excess of a medium effect size, those in range of small to medium effect sizes are most common.

Research Instrument. There are two parts of the survey questionnaire. The first part is a demographic questionnaire that collects relevant data pertaining to respondent's gender, civil status, highest educational attainment, academic position and years of service. The second part is the Professional Quality of Life (ProQOL) Scale Version 5, formulated by Hudnall Stamm (2009), which aims to measure the level of compassion satisfaction and compassion fatigue among faculty members. The ProQOL is a 30-item scale that uses Likert-type responses, which ranges from 0 (never) to 5 (very often). The degree of internal reliability and consistency of this instrument has been proven on acceptable levels from previous tests. The Cronbach α (alpha) scored the 3 subscales, compassion satisfaction (CS) with 0.88 reliability and consistency, burnout (BO) with 0.75, and secondary traumatic stress (STS) with 0.81.

Data Gathering Procedure. An ethical clearance (IRB Approval Number MUREC-Mar.21/COM-2018/4) was secured from the institutional review board to ensure that this study did not involve any form of invasion of the respondent's integrity. Prior to data gathering, the respondents received a written information about informed consent, purpose of the study, including its voluntary nature, study procedures, benefits of the participation, voluntary participation, including the right to withdraw anytime, and a guarantee of the maintenance of anonymity, and confidentiality of the data. Survey questionnaires were forwarded as an electronic form to faculty members' email addresses. The respondents were given two weeks to answer the questionnaire to avoid errors and inaccuracies with answers. Right after, the questionnaires were collected and tagged with number identifier to avoid confusion during data tabulation and groupings. Due to COVID-19 restrictions, the duration of data collection lasts for 1 year (December 2019 to December 2020).

Reliability of ProQOL

Three constructs were measured separately building the Compassion Satisfaction and Compassion Fatigue (Stamm, 2010). Compassion Fatigue scale is distinctly measured with 2 subconstructs, where the Secondary Traumatic Stress inter-scale correlations display a 2% of shared variance ($r = -.23$; $co-\sigma = 5\%$; $n = 1187$), and Burnout showing 5% shared variance ($r = -.14$; $co-\sigma = 2\%$; $n = 1187$). Although both Burnout and Secondary Traumatic Stress has a shared variance, both constructs are measured separately. The shared variance of 34% ($r = .58$; $co-\sigma = 34\%$; $n = 1187$) represents distress that is communal to both conditions. Although both measures negative effect, only the Secondary Traumatic Stress construct address fear.

Calculating the scores on the ProQOL

Reverse scoring was done in some items in the ProQOL (Stamm, 2010). This include items 1, 4, 15, 17, and 29. The summation of raw scores for each subscale was obtained for Compassion Satisfaction (CS = 3, 6, 12, 16, 18, 20, 22, 24, 27 and 30), Burnout (BS = 1r, 4r, 8, 10, 15r, 17r, 19, 21, 26 and 29r) and Secondary Traumatic Stress (STS = 2, 5, 7, 9, 11, 13, 14, 23, 25 and 28). Raw scores were then converted to z-score to normalize the scores to achieve $\bar{x} = 50.00$ and $s = 10.00$. The z-score was then converted to a t-score ready for multivariate analysis.

Multivariate General Linear Model was utilized to determine significant difference across profile (Civil Status, Highest Educational Attainment, Academic Positions, and Years in Service), and T-test was done to determine significant differences between Gender. Tukey Post Hoc test was employed to determine specific differences for those with more than 2 strata. Estimates of effect size and homogeneity were considered.

RESULTS

The multivariate test comparison on the mean vectors for Compassion Satisfaction and Compassion Fatigue ($df = 3$, Error $df = 367$) on: (a) Gender - Roy's Largest Root = 1.14, $F = 139.075$, $p = .000$, $\eta_p^2 = .53$; (b) Civil Status - a Roy's Largest Root = 25.87, $F = 3165.327$, $p = .000$, $\eta_p^2 = .96$; (c) Highest Educational Attainment - Roy's Largest Root = 2.24, $F = 274.319$, $p = .000$, $\eta_p^2 = .96$; (d) Academic Position - Roy's Largest Root = 0.22, $F = 27.004$, $p = .000$, $\eta_p^2 = .18$; and Years in Service - Roy's Largest Root = 2.61, $F = 320.510$, $p = .000$, $\eta_p^2 = .72$; were obtained (see Table 1). This means that the different strata in the profile were significantly different when considered jointly on Compassion Satisfaction and Compassion Fatigue with a large size affect across profile. The F value was exact statistic except for the Years in Service, where the statistic is an upper bound on F that yields a lower bound on the significance level.

(Insert table 1)

At the univariate level, differences between the strata per profile shows significant differences on Compassion Satisfaction, Burnout, and Secondary Traumatic Stress except in Academic Position (significantly different for Burnout) where Compassion Satisfaction obtained an $F = 0.11$ and $p = .735$, and Secondary Traumatic Stress obtained an $F = 1.99$ and $p = .159$. Significant difference results have large size affect except for Compassion Satisfaction and Burnout across Highest Educational Attainment with a medium effect size (both with $\eta_p^2 = .035$), and Academic Position on Burnout with small effect size ($\eta_p^2 = .022$).

T-test for Equality (see Table 2) determined a significant difference between Gender in the Compassion Satisfaction ($t=-4.77$; $df=383$; $p=.000$; $\bar{x}$ Difference=-4.74), and Burnout constructs ($t=5.57$; $df=321.45$; $p=.000$; $\bar{x}$ Difference=5.57). Females ($\bar{x}=52.49$; $s=9.17$) exhibit higher Compassion Satisfaction compared to males ($\bar{x}=47.75$; $s=10.20$), while males ($\bar{x}=52.65$; $s=7.85$) exhibit higher Burnout compared to females ($\bar{x}=47.08$; $s=11.25$). There is no observed difference in Secondary Traumatic Stress across Gender ($t=-0.99$; $df=320.77$; $p=.322$; $\bar{x}$ Difference=-1.03), where males obtained $\bar{x}=49.51$ with $s=8.15$, and females obtained $\bar{x}=50.54$ with $s=11.71$.

(Insert table 2)

Running Tukey Post Hoc Test reveals (see Table 3) that there is no significant difference between the Compassion Satisfaction between Single vs Married ($p=.59$), Single vs Separated ($p=.35$), Married vs Separated ($p=.15$). For Burnout, there is no significant difference between Master vs PhD ($p=.43$), and Assistant Professor vs Associate Professor ($p=1.00$). For Secondary Traumatic Stress, there is no significant difference between Master vs PostDoc ($p=.32$), PhD vs Post Doctorate ($p=.72$), and <5 years vs >15 years' service experience ($p=.07$). Other group comparisons obtained significant differences with p value ranging from .00 to .02.

Those with PhD have higher Compassion Satisfaction score compared to Lecturers and followed by Post Doctorate. Those with >15 years' service experience has higher Compassion Satisfaction score compared to those with <5 years' service experience and followed by 5 to 15 years' service experience.

For Burnout, singles are more prone to getting burnout compared to those who are married. Those who are separated are least to experience burnout. Those with Master and PhD degrees do not differ significantly in experiencing burnout compared to Post Doctorates who experience higher burnout. Assistant Professors and Associate Professors do not differ significantly in experiencing burnout compared to Lecturers who experience are less likely to experience burnout. Those with >15 years' service experience is more burned-out compared to those with <5 years' service experience burnout. Those with 5 to 15 years' service experience are the least to experience burnout.

Those who are single are most likely to experience Secondary Traumatic Stress compared to those who are married. Those who are separated are least to experience Secondary Traumatic Stress. Those with PhD are likely to experience more Secondary Traumatic Stress compared with Masters. But there is not much significance noticed between Master and Post Doctorate, and Post Doctorate and PhD. Those with 5 to 15 years' service experience have higher Secondary Traumatic Stress compared to those with 5 years, and more than 15 years' service experience.

(Insert table 3)

DISCUSSION

Based on the results, it was found out that female health science educators have higher compassion satisfaction than male health science educators. This phenomenon occurs because females as much more contented and have lower job expectations than males. And this feature was supported by the study conducted by Miao et al. (2017), wherein females seek a positive working relationship with their leaders and managers, unlike males who always have higher expectations like higher salary as well as promotion. Even when a full-time or part-time basis, females tend to have higher satisfaction than males (Devera & Maniago, 2017; Zou, 2015). This implies that females tend to have more pleasure in doing their job and avoid compassion fatigue, which is in oppose to the findings of Sprang et al. (2007) where females have tendencies to gain compassion fatigue rather than males.

On one hand, it was revealed that PhD degree holders tend to have higher compassion satisfaction among other variables. This is because PhD degree holders already reach the highest level of their contentment towards their job as educators. This study is supported by the study conducted by Aggari et al. (2020), wherein, nurses wanted to pursue a higher degree to prepare for their career growth and development leading to a higher degree of satisfaction in the workplace. As such, having higher compassion satisfaction can lead to more productivity among PhD degree holders and may decrease the incidence of burnout among faculty members (Chang & Davis, 2009). As such, it is a pleasure for the faculty members to handle their emotions leading to a more satisfying work (Chang, 2009) which is very important because lack of satisfaction together with overload among PhD holders can lead to emotional exhaustion (Jamaludin & You, 2019). This implies that the higher education attained by the faculty, the more they gain fulfilment with their job avoid compassion fatigue instead. On the other hand, it shows that more than 15 years of experience as educators tend to have higher compassion satisfaction. This is because staying for their job as educators for how many years shows that they are in their comfort zone already secondary to several factors like career and professional growth. It is otherwise, staying in their workplace and to their job is considered rewarding for their part as educators leading to more compassion satisfaction (Harr et al., 2014). Likewise, having years of experience already in the academe leads to combating compassion fatigue and embrace compassion satisfaction instead (Harr et al., 2014; Sprang et al., 2007). However, it is contradicting to the findings in one study, wherein teachers in India, even though they had been in the service for how many years, yet this factor doesn't contribute to their compassion satisfaction (Annalakshmi & Catherin Jayanthi, 2019). Overall, it indicates that years of experience can solve problems in the workplace and tend to mitigate compassion fatigue leading to more compassion satisfaction.

In this study, it was found out that males have a higher tendency of burnout than females. This result is opposing to the previous findings in a meta-analysis that females tend to gain more burnout than males because they tend to be more emotionally exhausted (Lindblom et al., 2006; Purvanova & Muros, 2010) leading to compassion fatigue (Sprang et al., 2007) and supported by other factors like variations of working hours and/or socioeconomic status (Norlund et al., 2010); however, even they are exhausted, an incident of disengagement among females was not significantly found (Allwood et al., 2020). However, the findings do not warrant that males health science educators are experiencing burnout than females because the perception of burnout varies from gender perspectives (Aldossari & Chaudhry, 2020; Moreau et al., 2008).

Moreover, the study revealed that being single has a higher tendency to acquire burnout than married and widowed faculties. This result is supported by Botianni et al (2019) wherein teacher who is single tends to have more roles in the academe; hence, they are more stressed than the others (Bottiani et al., 2019). Likewise, when they are stressed, they develop problems with skills in coping, classroom management and even the way they teach their students (Breeman et al., 2015).

It is also found out that post-doctoral degree holders acquire burnout compared to those who has low educational attainment. Since post-doctoral also have more work demands in the university particularly in research and program development; hence, they are more prone to burnout syndrome. However, in some studies, it is emphasized that doctoral degree holders were prone to burnout (Baker & Pifer, 2015; Vekkaila et al., 2018) which can cause cynicism (losing interest in one's work) and exhaustion (feeling of tiredness at work) (Vekkaila et al., 2018).

Further, it was found out that those health science educators with more than 15 years of experience tend to gain burnout. This is supported in a study wherein those who were in the university for how many years are felt more exhausted than the younger ones (Klusmann et al., 2008) considering that teaching can cause exhaustion than other types of jobs (Saloviita & Pakarinen, 2021); therefore, it is recommended to extremely have support to teachers/educators to lessen their burnout syndrome through giving opportunity for training that will enhance their capabilities (Prasojo et al., 2020).

When it comes to Secondary Traumatic Stress, it was found out that single, separated, PhD degree holders & been in the university for 5-15 years to have significant relationships. It is supporting to studies that married educators tend to have less stress and even burnout (Farber, 2019; Farber et al., 2020;) maybe because they tend to be more inspired to do their job and being dedicated than those who were singles and separated. Moreover, those teachers who wanted to become educators since their young age tends to be satisfied as they gain more years of experience in the school (Caringi et al., 2015) but still it depends on the trauma that they acquired like stress from the workplace or on their colleagues (Borntrager et al., 2012) which leads them to decide to move to another placement (Caringi et al., 2015).

Data collection was mainly affected by the implementation of community lockdowns due to COVID-19 restrictions. Some respondents did not return the survey questionnaires or did not respond to emails resulting to a 70% retrieval rate of survey questionnaires.

CONCLUSION

Demographic factors can support compassion satisfaction, burnout, and secondary traumatic stress among health science educators. This implies that these variables mainly affect their professional quality of life which may influence their performance, roles, responsibilities and functions in the university. Nevertheless, this paper suggests a recommendation plan to address factors which are essential for the faculty members to attain their professional quality of life as well as the main objectives and goals of their university for the quest of providing quality education.

Ethical Code: IRB Approval Number: MUREC-Mar.21/COM-2018/4

IRCT Code: Not applicable

Conflicts of interest: The authors declare that there are no conflicts of interest.

Authors' contributions:

G.H., J.D.M., C.J.S.O., M.R.A., and H.A.H. conceived and planned the study. G.H., J.D.M., M.R.A., B.A.V., and H.A.H. carried out the data collection. G.H., J.D.M., C.J.S.O., R.M.O., and M.R.A. contributed to sample preparation. G.H., B.A.V. and R.M.O. performed the calculations. G.H., J.D.M., C.J.S.O., R.M.O., and M.R.A. contributed to the interpretation of the results. G.H. and J.D.M. took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis, and manuscript.

Acknowledgment: The authors would like to thank the deanship of scientific research for supporting this work.

Financial support and sponsorship: This study was self-funded by the authors.

REFERENCES

1. Abendroth, M. (2011). Overview and summary: Compassion fatigue: Caregivers at risk. *OJIN: The Online Journal of Issues in Nursing*, 16(1). <https://doi.org/10.3912/OJIN.Vol16Noo1OSo1>

2. Aggari, M. I., Diño, M. J. S., & Orte, C. J. S. (2020). Leaders shaping leadership: Knowledge, professional values and competency as prognosticators of career growth and development among nurses. *Enfermería Clínica*, 30, 9–14. <https://doi.org/10.1016/j.enfcli.2019.09.020>
3. Aldossari, M., & Chaudhry, S. (2020). Women and burnout in the context of a pandemic. *Gender, Work & Organization*, gwao.12567. <https://doi.org/10.1111/gwao.12567>
4. Allwood, C. M., Geisler, M., & Buratti, S. (2020). The relationship between personality, work, and personal factors to burnout among clinical psychologists: Exploring gender differences in Sweden. *Counselling Psychology Quarterly*, 1–20. <https://doi.org/10.1080/09515070.2020.1768050>
5. Annalakshmi, N. & Catherin Jayanthi, A. (2019). Analysis of compassion fatigue and compassion satisfaction among secondary school teachers. *The International Journal of Analytical and Experimental Modal Analysis*, 11(10). 828–833.
6. Babbie, E. R. (2020). *The practice of social research*. Cengage learning.
7. Baker, V. L., & Pifer, M. J. (2015). Antecedents and outcomes: Theories of fit and the study of doctoral education. *Studies in Higher Education*, 40(2), 296–310. <https://doi.org/10.1080/03075079.2013.8239366>
8. Borntrager, C., Caringi, J. C., van den Pol, R., Crosby, L., O'Connell, K., Trautman, A., & McDonald, M. (2012). Secondary traumatic stress in school personnel. *Advances in School Mental Health Promotion*, 5(1), 38–50. <https://doi.org/10.1080/1754730X.2012.664862>
9. Bottiani, J. H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77, 36–51. <https://doi.org/10.1016/j.jsp.2019.10.002>
10. Breeman, L. D., Wubbels, T., van Lier, P. A. C., Verhulst, F. C., van der Ende, J., Maras, A., ... Tick, N. T. (2015). Teacher characteristics, social classroom relationships, and children's social, emotional, and behavioral classroom adjustment in special education. *Journal of School Psychology*, 53(1), 87–103. <https://doi.org/10.1016/j.jsp.2014.11.005>
11. Campbell, R. (2006). Rape survivors' experiences with the legal and medical systems: Do rape victim advocates make a difference?. *Violence against women*, 12(1), 30–45. <https://doi.org/10.1177%2F1077801205277539>
12. Caringi, J. C., Stanick, C., Trautman, A., Crosby, L., Devlin, M., & Adams, S. (2015). Secondary traumatic stress in public school teachers: Contributing and mitigating factors. *Advances in School Mental Health Promotion*, 8(4), 244–256. <https://doi.org/10.1080/1754730X.2015.1080123>
13. Carter, S. B. (2013). The tell tale signs of burnout... Do you have them. *Psychology Today*. <https://www.psychologytoday.com/blog/high-octane-women/201311/the-tell-tale-signs-burnout-do-you-have-them>
14. Chang, M.-L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, 21(3), 193–218. <https://doi.org/10.1007/s10648-009-9106-y>
15. Chang, M.-L., & Davis, H. A. (2009). Understanding the Role of Teacher Appraisals in Shaping the Dynamics of their Relationships with Students: Deconstructing Teachers' Judgments of Disruptive Behavior/Students. In P. A. Schutz & M. Zembylas (Eds.), *Advances in Teacher Emotion Research* (pp. 95–127). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4419-0564-2_6
16. Conrad, D., & Kellar-Guenther, Y. (2006). Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child abuse & neglect*, 30(10), 1071–1080. <https://doi.org/10.1016/j.chiabu.2006.03.009>
17. Farber, J. E. (2019). Cultural Competence of Baccalaureate Nurse Faculty: Relationship to Cultural Experiences. *Journal of Professional Nursing*, 35(2), 81–88. <https://doi.org/10.1016/j.profnurs.2018.09.005>
18. Farber, Dr. J. E., Payton, Dr. C., & Dorney, Dr. P. (2020). Life balance and professional quality of life among baccalaureate nurse faculty. *Journal of Professional Nursing*, 36(6), 587–594. <https://doi.org/10.1016/j.profnurs.2020.08.010>
19. Garcia, C. C., & Maniago, J. D. (2018). Emotional intelligence and conflict management styles of Filipino middle managers in select higher education institutions. *Asian Journal of Interdisciplinary Research*, 1(1), 42–55. <https://doi.org/10.34256/ajir1815>
20. Gentry, J. E., & Baranowsky, A. B. (2013). Compassion fatigue resiliency-A new attitude. *Compassion fatigue-Programs with legs: The ARP, CFST, & CF resiliency training*. <https://psychink.com/wp-content/uploads/2019/08/Compassion-Resiliency-A-New-Attitude-2019.pdf>
21. Harr, C. R., Brice, T. S., Riley, K., & Moore, B. (2014). The Impact of Compassion Fatigue and Compassion Satisfaction on Social Work Students. *Journal of the Society for Social Work and Research*, 5(2), 233–251. <https://doi.org/10.1086/676518>
22. Huggard, P. (2003). Secondary traumatic stress doctors at risk. *New Ethicals Journal*, 6(9), 9–14.
23. Hundall Stamm, B. (2009). Professional quality of life measure: Compassion, satisfaction, and fatigue version 5 (ProQOL). <http://hdl.handle.net/20.500.11990/1329>

24. Jamaludin, I. I., & You, H. W. (2019). Burnout in relation to Gender, Teaching Experience, and Educational Level among Educators. *Education Research International*, 2019, 1–5. <https://doi.org/10.1155/2019/7349135>
25. Klusmann, U., Kunter, M., Trautwein, U., Lüdtke, O., & Baumert, J. (2008). Engagement and Emotional Exhaustion in Teachers: Does the School Context Make a Difference? *Applied Psychology*, 57(s1), 127–151. <https://doi.org/10.1111/j.1464-0597.2008.00358.x>
26. Lindblom, K. M., Linton, S. J., Fedeli, C., & Bryngelsson, I.-L. (2006). Burnout in the working population: Relations to psychosocial work factors. *International Journal of Behavioral Medicine*, 13(1), 51–59. https://doi.org/10.1207/s15327558ijbm1301_7
27. Magloff, L. (2015). How to increase workplace satisfaction. Demand Media, Chron Small Business Article. <https://smallbusiness.chron.com/job-satisfaction-vs-production-18821.html>
28. Maniago, J. D. (2015). Personality Domains and Emotional Intelligence on Relational Nursing Practice among Public Health Nurses. *Asian Journal of Health*, 5, 12–28. <http://dx.doi.org/10.7828/ajoh.v5i1.774>
29. Maniago, J. D., & Alamri, M. (2019). Emotional Intelligence and Conflict Management Styles of Faculty Members Teaching Nursing and Other Allied Health Programs. *Majmaah Journal of Health Sciences*, 7(2), 33–44. <http://dx.doi.org/10.5455/mjhs.2019.02.005>
30. Maniago, J. D., & Albougami, A. (2019). A national survey of transpersonal caring competency among emergency room nurses in Saudi Arabia. *International Journal of Advanced and Applied Sciences*. 2020 Jan;7(1):145–151. <https://doi.org/10.21833/ijaas.2020.01.015>
31. Maniago, J. D., Albougami, A., Orte, C. J. S., Feliciano, E. E., Malabanan, M. C., Boshra, A. Y., ... & Cajigal, J. V. (2020). Stakeholders' Quality Framework of Nursing Education: A Brief Report. *International Journal of Medical Research & Health Sciences*, 9(4), 44–49. <https://www.ijmrhs.com/medical-research/stakeholders-quality-framework-of-nursing-education-a-brief-report.pdf>
32. Miao, Y., Li, L., & Bian, Y. (2017). Gender differences in job quality and job satisfaction among doctors in rural western China. *BMC Health Services Research*, 17(1), 848. <https://doi.org/10.1186/s12913-017-2786-y>
33. Moreau, M.-P., Osgood, J., & Halsall, A. (2008). Equal Opportunities Policies in English Schools: Towards Greater Gender Equality in the Teaching Workforce? *Gender, Work & Organization*, 15(6), 553–578. <https://doi.org/10.1111/j.1468-0432.2008.00405.x>
34. Norlund, S., Reuterwall, C., Höög, J., Lindahl, B., Janlert, U., & Birgander, L. S. (2010). Burnout, working conditions and gender—Results from the northern Sweden MONICA Study. *BMC Public Health*, 10, 326. <https://doi.org/10.1186/1471-2458-10-326>
35. Polit, D. F., Beck, C. T., & Polit, D. (2012). Resource manual for nursing research. *Generating and Assessing evidence for nursing practice. Ninth Edition. China: Wolters Kluwer Health*.
36. Prasajo, L. D., Habibi, A., Mohd Yaakob, M. F., Pratama, R., Yusof, M. R., Mukminin, A., ... Hanum, F. (2020). Teachers' burnout: A SEM analysis in an Asian context. *Heliyon*, 6(1), e03144. <https://doi.org/10.1016/j.heliyon.2019.e03144>
37. Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior*, 77(2), 168–185. <https://doi.org/10.1016/j.jvb.2010.04.006>
38. Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organisation-level variables. *Teaching and Teacher Education*, 97, 103221. <https://doi.org/10.1016/j.tate.2020.103221>
39. Schupp, L. J. (2015). *Assessing and treating trauma and PTSD*. PESI Publishing & Media.
40. Sprang, G., Clark, J. J., & Whitt-Woosley, A. (2007). Compassion Fatigue, Compassion Satisfaction, and Burnout: Factors Impacting a Professional's Quality of Life. *Journal of Loss and Trauma*, 12(3), 259–280. <https://doi.org/10.1080/15325020701238093>
41. Stamm, B.H. (2010). The Concise ProQOL Manual, 2nd Ed. Pocatello, ID: ProQOL.org.
42. Vekkaila, J., Virtanen, V., Taina, J., & Pyhältö, K. (2018). The function of social support in engaging and disengaging experiences among post PhD researchers in STEM disciplines. *Studies in Higher Education*, 43(8), 1439–1453. <https://doi.org/10.1080/03075079.2016.1259307>
43. Zou, M. (2015). Gender, work orientations and job satisfaction. *Work, Employment and Society*, 29(1), 3–22. <https://doi.org/10.1177/0950017014559267>

Table 1. Multivariate Test Compassion Satisfaction and Compassion Fatigue across Profile

Effect	Roy's Largest Root	F	Hypothesis df	Error df	p	η_p^2
Intercept	5113.81	625589.662 ^a	3	367	.000	1.00
Gender	1.14	139.075 ^a	3	367	.000	.53
Civil Status	25.87	3165.327 ^a	3	367	.000	.96
Highest Educational Attainment	2.24	274.319 ^a	3	367	.000	.69
Academic Position	0.22	27.004 ^a	3	367	.000	.18
Years in Service	2.61	320.510 ^b	3	368	.000	.72

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table 2. Test Between-Subjects Effects

Source		Type III SS	df	MS	F	p	η_p^2
Gender	<i>tCS</i>	1155.826	1	1155.83	85.18	.000	.188
	<i>tBO</i>	2719.581	1	2719.58	190.49	.000	.340
	<i>tSTS</i>	967.746	1	967.75	43.57	.000	.106
Civil Status	<i>tCS</i>	4198.145	1	4198.14	309.37	.000	.456
	<i>tBO</i>	1094.380	1	1094.38	76.65	.000	.172
	<i>tSTS</i>	4200.020	1	4200.02	189.11	.000	.339
Highest Educational Attainment	<i>tCS</i>	183.612	1	183.61	13.53	.000	.035
	<i>tBO</i>	193.816	1	193.82	13.58	.000	.035
	<i>tSTS</i>	1394.704	1	1394.70	62.80	.000	.145
Academic Position	<i>tCS</i>	1.560	1	1.56	0.11	.735	.000
	<i>tBO</i>	116.266	1	116.27	8.14	.005	.022
	<i>tSTS</i>	44.160	1	44.16	1.99	.159	.005
Years in Service	<i>tCS</i>	6023.747	2	3011.87	221.95	.000	.546
	<i>tBO</i>	7403.306	2	3701.65	259.27	.000	.584
	<i>tSTS</i>	6573.129	2	3286.56	147.98	.000	.445
Error	<i>tCS</i>	5007.324	369	13.570			
	<i>tBO</i>	5268.205	369	14.277			
	<i>tSTS</i>	8195.069	369	22.209			

a. R Squared = .870 (Adjusted R Squared = .864)

b. R Squared = .863 (Adjusted R Squared = .857)

c. R Squared = .787 (Adjusted R Squared = .778)

Table 3. Tukey Post Hoc Test

Profile Category	Group Comparison	tCS			tBO			tSTS		
		MD	SE	p	MD	SE	p	MD	SE	p
Civil Status	<i>Single vs Married</i>	.46	.46	.59	7.53	.48	.00	6.17	.59	.00
	<i>Single vs Separated</i>	-1.65	1.18	.35	11.94	1.22	.00	21.49	1.52	.00
	<i>Married vs Separated</i>	2.11	1.13	.15	4.40	1.16	.00	15.33	1.45	.00
Highest Educational Attainment	<i>Master's vs PhD</i>	-5.96	.52	.00	-0.66	.53	.43	-1.80	0.66	.02
	<i>Master's vs PostDoc</i>	5.85	.69	.00	-5.47	.71	.00	-1.24	0.89	.34
	<i>PhD vs PostDoc</i>	11.82	.56	.00	-4.81	.58	.00	0.56	0.72	.72
Academic Position	<i>Lecturer vs Assistant Professor</i>				-2.33	.50	.00			
	<i>Lecturer vs Associate Professor</i>				-2.31	.62	.00			
	<i>Assistant Professor vs Associate Professor</i>				.02	.50	1.00			
Years Service	<i><5 years vs 5 to 15 years</i>	2.58	0.41	.00	-1.87	0.42	.00	-5.07	0.53	.00
	<i><5 years vs >15 years</i>	-11.12	0.57	.00	12.55	0.59	.00	-1.64	0.73	.07
	<i>5 to 15 years vs >15 years</i>	-13.70	0.55	.00	14.42	0.56	.00	3.43	0.70	.00