Catalyst
ISSN 2408-137X, Volume 17, 2018

Work Environment, Sleep Quality, Confidence in Decision-Making and Emotional Labor of Nurses Mediated by Self-Efficacy

John Patrick B. Flores, Dina D. Galang, Jezamine De Leon, Susy A. Jael, and Myrtle C. Orbon

Abstract

This descriptive-correlational study aimed to determine the relationship of work environment and sleep quality to confidence in decision-making and emotional labor among nurses as mediated by self-efficacy. Two hundred-fifty staff nurses from eight private hospitals were purposively selected to answer a self-constructed questionnaire. Mean, standard deviation, frequency distribution, Pearson's product moment correlation, and structural equation modeling were used for statistical analysis. Findings revealed that work environment and sleep quality were *fair,* self-efficacy and confidence in decision-making were *high,* and the extent of emotional labor was *average.* Positive work environments were associated with higher confidence in decision-making. Sleep quality was not associated with any differences in self-efficacy, confidence in decision-making, or emotional labor. The mediation analysis showed that the effect of the work environment on confidence in decision-making is partially mediated by self-efficacy, while the effect of the work environment on deep acting emotional labor is completely mediated by self-efficacy. Results indicated that the final model was a good fit.

Keywords: *Work environment, sleep quality, decision-making, emotional labor, self-efficacy, nursing*

Introduction

Nurses comprise the largest group of health professionals. Nurses play an important role in contributing to the population's health which has been increasingly acknowledged and recognized by the World Health Organization (WHO, 2015; International Council of Nurses, 2016). Their work environment should enable them to practice to their full scope that will accelerate nursing innovation and better-quality patient care (Canadian Nurses Association, 2013).

In the clinical setting, nurses continuously face demands to make care decisions. As soon as they arrive on their units at the beginning of each shift, they already have a mental list of activities that they should perform. All throughout the shifts, they gather, filter, interpret, and transfer data into meaningful information required to diagnose, treat, and make decisions about the care of individual patients (Viejo, 2005). On the discharge of their duties and responsibilities, they are sometimes nagged with numerous complaints from their colleagues, doctors, patients, patients' significant others, superiors, and work environment, resulting in engagement in emotional labor (Brown, 2011).

Emotional labor was first introduced by Arlie Hochschild. It is defined as one's ability to control his/her feelings to fulfil the goals and expectations of the organizations. Hochschild (1983) stated that the two types of emotional labor being used by service-based employees including nurses are surface acting and deep acting. Surface acting is when someone fakes his/her outward displays of emotions but does not actually attempt to feel the emotions that are publicly displayed**.** It is the regulation of actions in face-to-face interactions such as smiling, shrugging, sneering and laughing (Theodosius, 2008). In this situation, the person does the needed feeling as a reaction to the actions of others (Talepbour, Khurasghani & Ghasemi, 2013).

On the other hand, deep acting is one's attempts to modify feelings to match the required outward displays. Through the use of emotion, memory, and imagination, a person would be able to transfer those feelings to the current situation. Deep acting is useful in producing proper responses to situations (Theodosius, 2008).

Based on previous studies abroad, a healthy work environment, sleep quality, and self-efficacy influence the nurse's confidence in decision-making and emotional labor. Basically, the work environment is one of the nurses' pools of resources in delivering quality healthcare services. The quality of the work environment impacts outcomes experienced by patients as well as the nurses working within these settings (Purdy, 2011). According to the study of Shang, Friese, Wu, and Aiken (2012), nursing outcomes and quality of care can be improved by improving nurse work environments.

Poor sleep quality is related to a host of cognitive and emotional deficits, including a bias towards high-risk behaviors, diminished attentional and behavioural control, and poor emotional regulation. One study revealed that poorer sleep quality was associated with more apathy and less self-esteem when making decisions as well as marginally slower reaction time.

Self-efficacy is defined by Albert Bandura as having a strong sense that one is capable of accomplishing all that he/she must do to achieve his/her goals. It greatly affects one's ability to gain the knowledge and skills needed for critical thinking (Buchanan, 2016). Self-efficacy influences problem solving decision-making, and its efficiency. When faced with complex decisions, people who have confidence in their ability to solve problems use their cognitive resources more effectively than those people who doubt their cognitive skills. Self-efficacy is a powerful predictor of educational achievements (Gosselin & Maddux, 2003).

Further, self-efficacy has an impact on an individual's emotional reactions and thought patterns (Cherian & Jacob, 2013). Lings, Durden, Lee, and Cadogan (2009) found in their study that the impact of emotional exhaustion on strain is mitigated somewhat by self-efficacy, which suggests that employees who are more confident in their ability to provide a service can withstand higher levels of emotional labor and emotional exhaustion than employees who are less self-confident.

In summary, nurses often make decisions on how to meet the needs of their clients. As they perform their responsibilities, they too are expected to be compassionate and empathic on top of the challenges from their colleagues, superior and work environment in general. Though there is mounting evidence that work environment, sleep quality, and self-efficacy influence confidence in decision-making and emotional labor, there is a dearth of study on the relationship of work environment, sleep quality, confidence in decision-making and emotional labor as mediated by self-efficacy, thus this study.

Objective

This study aimed to determine the relationship of work environment and sleep quality to confidence in decision-making and emotional labor among nurses as mediated by self-efficacy.

Methods

This descriptive correlational study studied 250 staff nurses selected through purposive sampling from eight private hospitals in the province of Laguna. Registered nurses, aged 22-35, were included in the study and included those who had worked in the general wards for six months and above, irrespective of their work status, gender, shift, and marital status.

A self-constructed and adopted questionnaire was utilized in this study. The research instrument consisted of five parts. The first part was self-constructed based on previous studies and literature. It measured the work environment and had three dimensions, namely: interpersonal relationship, organizational support, and working conditions. The second part was based on the study of Kasenda (2015) and assessed the sleep quality of the respondents. The third part sought to assess the self-efficacy of the respondents. Two of the items were adapted from Seaman's (2015) study, but the rest were derived from the literature. The fourth part which was based on the Decision-making Confidence Survey (n.d), which measured the confidence in decision-making of the nurses. The fifth part sought to assess the emotional labor of the nurses in terms of deep and surface acting. This was based on the Emotional Labor Scale by Brotheridge and Lee (2002). All the items except those about sleep quality were measured on a five-point Likert scale. Items on sleep quality were measured using a three-point Likert Scale.

A period of one week was given to respondents to complete the questionnaire, and a 98% response rate was achieved for return of the questionnaires for data analysis. Cronbach's alpha was computed for items to measure internal consistency. Cronbach alpha coefficients were 0.898 for interpersonal relationship; 0.966 for organizational support; 0.901 for working condition; 0.897 for sleep quality; 0.912 for self-efficacy; 0.804 for confidence in decision-making; and 0.715 for emotional labor.

Ethical guidelines for professional conduct were observed throughout the study. Maintenance of the respondent's privacy and confidentiality of records was observed by concealing their real names and identity. A code number was written on the questionnaire for each participant.

Mean, standard deviation, frequency distribution, and percentage were used to determine the degree of the work environment, sleep quality, self-efficacy, and confidence in decision-making and emotional labor. Pearson's product moment correlation was used to determine the relationship between work environment and sleep quality to self-efficacy; work environment and sleep quality to confidence in decision-making and emotional labor; self-efficacy to confidence in decision-making and emotional labor; work environment and sleep quality to confidence in decision-making and emotional labor as mediated by self-efficacy.

Results and Discussion

Work Environment

Table 1 describes the work environment of the nurses, showing a grand mean of 3.94 (SD=0.39), which indicates that the nurses considered their work environment as *good*. This result implies that the respondents have a positive work environment wherein they reap social, health, and personal benefits from a positive atmosphere at their place of employment.

Table 1. Descriptive Results of Work Environment

No.	Item	M	SD	SR	VI
1.	Interpersonal Relationships	3.83	0.52	Agree	Good
2.	Organizational Support	4.33	0.61	Agree	Good
3.	Working Conditions	3.68	0.54	Agree	Good
	OVERALL MEAN	**3.94**	**0.39**	**Agree**	**Good**

Very Good = 4.50-5.00; Good = 3.50-4.49; Average = 2.50-3.49; Poor = 1.50-2.49; Very Poor = 1.00-1.49

A previous study of Kirwan, Matthews, and Scott (2013) supports the result of our study indicating that a positive practice environment enhances patient safety outcomes. The importance of work environment should be recognized and manipulated as important influences on patient safety. Another implication was found in the study conducted by the Robert Wood Johnson Foundation's RN work project (2014), which found that a physical work environment that facilitated RN's efficiency, teamwork, and inter-professional communication was related to higher job satisfaction.

Sleep Quality

Table 2 shows a grand mean of 1.98 (SD=0.47), which has a grand scale response of *slightly agree,* revealing that the sleep quality of the nurses was *fair*. To support the data of the sleep quality of nurses, the researchers measured the number of hours of sleep of the respondents. The grand mean of the hours of sleep was 6.35 (SD=1.24), which implies that most of the nurses sleep 6 hours and 35 minutes on a daily basis.

Most nurses, during their student days, are required to experience different shifts to prepare for the actual working shifts of a graduate professional nurse. Zverev and Misiri (2009) posited that rapid and continuous rotation of shifts leads to a lasting alteration of circadian rhythms and to a transitory increase of psychological disturbances after the night shift.

Stokowski (2013) added that people who work conventional daytime hours seldom go to bed the minute they get home from work. He also stated that a similar practice is common among night shift nurses. Others, fewer in number, prefer to stay awake a couple of hours, then sleep and arise again

just before it is time to leave for work—a pattern that matches that of a typical day worker. After arriving home, these night shift nurses wind down by eating, reading, checking e-mail, socializing or watching TV.

Table 2. Sleep Quality of the Respondents

No.	Item	Mean	SD	SR	VI
1.	Upon waking up I feel: Alert	2.03	0.54	Slightly Agree	Fair
2.	Refreshed	2.02	0.58	Slightly Agree	Fair
3.	Energized	2.04	0.55	Slightly Agree	Fair
4.	Contented with my night's sleep	1.81	0.62	Slightly Agree	Fair
5.	Relaxed	2.00	0.60	Slightly Agree	Fair
	OVERALL MEAN	**1.98**	**0.47**	**Slightly Agree**	**Fair**

Good = 2.50-3.00; Fair = 1.50-2.49; Poor = 1.00-1.49

Level of Self-Efficacy and Confidence in Decision-making

Table 3 shows a mean score of 4.21 (SD=0.57) for self-efficacy that corresponds with a grand scale response of *often* and is interpreted as *high*. Similarly, confidence in decision-making had a grand mean score of 4.13 (SD=0.62), which is interpreted as *high,* as seen in Table 4. These imply that nurses in Laguna have a high level of self- efficacy and confidence in terms of decision-making.

Table 3. Level of Self-Efficacy

No.	Item	M	SD	SR	VI
1.	I believe that I can finish a task completely	4.34	0.73	Often	High
2.	I am willing to accept the emotional challenges in my work environment.	4.34	0.73	Often	High
3.	I can easily recover from the setbacks in my work environment.	4.16	0.76	Often	High
4.	I see to it that I put the value to my commitment in my work environment.	4.45	0.69	Often	High
5.	I set goals that are higher than my previous achievements.	4.40	0.72	Often	High
6.	I believe that everything I do in my work environment produces good outcomes.	4.42	0.67	Often	High
*7.	I feel that I am not a competent staff nurse in the work environment	3.64	1.28	Sometimes	Average
*8.	I cannot multitask.	3.96	1.17	Often	High
	OVERALL MEAN	**4.21**	**0.57**	**Often**	**High**

Very High = 4.50-5.00; High = 3.50-4.49; Average = 2.50-3.49; Low = 1.50-2.49; Very Low = 1.00-1.49; **RECODED*

The results in Table 4 show that nurses after assessing the needs of their patients are highly competent and confident as they perform their roles and responsibilities in the work setting. The study of Tsai, Tsai, Chen, and Lee (2014) confirm the present result wherein their respondents, who were nurses, had a high level of self-efficacy. This helped increase nursing competency and improved the quality of medical and nursing care. Moreover, Welsh (2014) also supports our findings by confirming that nurses with a high level of self-efficacy beliefs are more likely to address challenges, remain motivated to act, and expend more effort to achieve desired outcomes than nurses with lower self-efficacy.

Further, Hoffman and Elwin (2004) stated that nurses who have a high level of confidence had higher frequencies of encountering repeated situations and data that could influence the

development of a deeper understanding, which leads to confident practice. It could also be concluded that these nurses have good critical thinking ability that could add confidence in making decisions.

Table 4. Level of Confidence in Decision-Making

No.	Item	M	SD	SR	VI
1.	I identify factors which are important when deciding what intervention to do.	4.23	0.74	Often	High
2.	I know how to:				
	a. motivate me to continue getting information	4.28	0.72	Often	High
	b. think alternatives until I come up with a good choice	4.23	0.77	Often	High
3.	I shut out distractions so I can concentrate on deciding on one goal.	4.02	0.85	Often	High
4.	I recognize my own anxiety and calm myself before deciding to avoid making poor choices.	4.13	0.75	Often	High
5.	I anticipate important decisions so that I can have needed information and be prepared when the time comes for deciding.	4.19	0.75	Often	High
6.	I know who can and cannot give information or counsel that is helpful.	4.07	0.82	Often	High
7.	I estimate the amount of each satisfaction of my alternate choices.	3.98	0.79	Often	High
8.	I estimate the amount of time each of my options will require.	3.98	0.82	Often	High
9.	I find out the important facts about an action before making a decision.	4.17	0.78	Often	High
10.	I estimate whether I have the ability /energy to accomplish that certain choice.	4.15	0.75	Often	High
11.	I diagnose current problems by looking at past decisions that did not work so that I can improve my decision-making.	4.17	0.78	Often	High
	OVERALL MEAN	**4.13**	**0.62**	**Often**	**High**

Very High = 4.50-5.00; High = 3.50-4.49; Average = 2.50-3.49; Low = 1.50-2.49; Very Low = 1.00-1.49

Extent of Emotional Labor

A grand mean of 2.98 (SD=0.69) is seen in Table 5 for emotional labor. This corresponds to a grand scale response of *sometimes,* showing that the extent of emotional labor experienced by nurses was *average*. This means that nurses do not usually utilize emotional labor since it requires displaying higher levels of compassion which can cause emotional exhaustion.

Table 5. Descriptive Results of Emotional Labor

No.	Item	M	SD	SR	VI
1.	Surface Acting	2.79	0.80	Sometimes	Average
2.	Deep Acting	3.17	0.86	Sometimes	Average
	OVERALL MEAN	**2.98**	**0.69**	**Sometimes**	**Average**

Very High = 4.50-5.00; High = 3.50-4.49; Average = 2.50-3.49; Low = 1.50-2.49; Very Low = 1.00-1.49

This finding is further supported by Cheng, Bartram, Karim, and Leggat (2013) who stated that the reason why nurses sometimes utilize emotional labor is because the display of appropriate emotional expression does not necessarily lead to positive outcomes and that it is insufficient to superficially disguise the positive display.

Relationship of Work Environment and Sleep Quality to Self-Efficacy

Table 6 indicates that interpersonal relationship (r= 0.355 p=.000), organizational support (r=0.281 p=.000), and working condition (r=0.259 p=0.000) were significantly related to self-efficacy at 0.01

level (2-tailed). Therefore, the overall work environment was found to be significantly related to self-efficacy (*r*=0.419 *p*=0.000*)* at 0.01 level (2-tailed). On the other hand, sleep quality was found to have no significant relationship with self-efficacy (*p*=0.102 *r*=0.109).

The result implies that having a good work environment for nurses could result in higher self-efficacy, which could affect the quality of their performance in the work setting. It also implies that self-efficacy is unaffected by the nurses' quality of sleep.

Table 6. Relationship of Work Environment and Sleep Quality to Self-Efficacy

	Self-Efficacy		
	R	*P*	VI
Interpersonal relationship	0.355**	.000	S
Org. Support	0.281**	.000	S
Working Condition	0.259**	.000	S
Overall Work Environment	0.419**	.000	S
Sleep Quality	0.102	.109	NS

*Correlation is significant at the 0.05 level; **Correlation is significant at the 0.01 level

The correlation between work environment and self-efficacy supports the theoretical framework of the study, where the work environment provides the nurse with sufficient resources such as training, trusting relationship and clear communications to enhance their self-efficacy. However, the relationship of sleep quality and self-efficacy do not support the theoretical framework, where the sleep quality of a nurse is viewed as one of the resources of a particular individual that could strengthen their self-efficacy. It also contradicts the results of the study done by Ranjbaran, Dehdari, Majdabadi, and Sadeghniiat-Haghighi (2014) wherein people with increased sleep quality were found to have a higher sense of self-efficacy.

Relationship of Work Environment and Sleep Quality to Confidence in Decision-Making

Table 7 indicates that interpersonal relationship (*r*= 0.285, *p*=.000, r^2 =0.08)), organizational support (*r*=0.262, *p*=.000, r^2= 0.06), and working condition (*r*=0.221, *p*=.000, r^2=0.04) were significantly related to confidence in decision-making at 0.01 level (2-tailed). Looking closely at these results, though each indicators of work environment were significant, their relationship to confidence in decision-making was weak to moderate. The overall work environment was found to be significantly related to confidence in decision-making at 0.01 level (2-tailed). In general, the different indicators of work environment contribute 13% to the variance in confidence in decision-making.

Table 7. Relationship of Work Environment and Sleep Quality to Confidence in Decision-Making

	Confidence in Decision- Making		
	R	*P*	VI
Interpersonal relationship	0.285**	.000	S
Org. Support	0.262**	.000	S
Working Condition	0.221**	.000	S
Overall Work Environment	0.361**	.000	S
Sleep Quality	0.092	.149	NS

*Correlation is significant at the 0.05 level; ** Correlation is significant at the 0.01 level

The findings show that the influence of work environment on confidence in decision-making is weak to strong. This implies that if a nurse's work environment is highly favourable, their confidence in decision-making could be increased and could result in productive decisions pertaining to the patient's care. A healthy work environment positively affects nurses' confidence in decision-making. When nurses perceive that they are having a harmonious relationship and smooth flow of communication with their colleagues, they are most likely to be more confident in making decisions.

Apart from it, the full support of the organization and good working conditions contribute to the productivity of a nurse especially in terms of their confidence in decision-making.

On the other hand, sleep quality and confidence in decision-making has a coefficient of 0.092 (p=0.149), which was not significant. This implies that the nurse's sleep quality does not influence their confidence in decision-making in the environment under investigation.

Relationship of Work Environment and Sleep Quality to Emotional Labor

Table 8 shows that the correlation of work environment and emotional labor, when taken as a whole, was not significant. However, work environment, in terms of organizational support, is related to emotional labor in terms of surface acting (*r*= -.129 *p*= .042). The direction of their relationship is negative.

Table 8. Relationship of Work Environment and Sleep Quality to Emotional Labor

	Surface Acting			Deep Acting			Overall Emotional Labor		
	R	*P*	VI	*r*	*p*	VI	*R*	*p*	VI
Interpersonal relationship	-0.078	0.218	NS	0.017	0.791	NS	-0.034	0.588	NS
Org. Support	-.129*	0.042	S	-0.034	0.587	NS	-0.096	0.132	NS
Working Condition	0.016	0.805	NS	0.063	0.322	NS	0.048	0.449	NS
Overall Work Environment	-0.094	0.772	NS	0.018	0.772	NS	-0.042	0.505	NS
Sleep Quality	0.014	0.829	NS	0.048	0.454	NS	0.037	0.555	NS

*Correlation is significant at the 0.05 level; ** Correlation is significant at the 0.01 level

The findings imply that the higher the organizational support received by nurses in the work environment, the lower they manifest surface acting. This finding is supported by Mikeska, Hamwi, Friend, Rutherford, and Park (2015) who indicated that social support may offset the harm surface acting poses to organizational commitment.

Furthermore, the correlation of sleep quality to emotional labor was found to be not significant (*r*=0.014 *p*= 0.829). The result implies that no matter what the sleep quality of the nurse is, their regulation of emotions is apparently not affected. One of the implications noted is that most of the previous studies on this topic were done outside the Philippines. Remarkably, Filipino nurses, as observed, usually have only 3-5 hours of sleep per night as they were trained in this manner during their internship days. Hence, their emotional labor is not as affected by sleep deprivation. This result opposes the findings of Beattie, Kule, Espie, and Biello (2015) who stated that sleep deprivation is associated with diminished emotional expressivity and impaired emotion recognition.

Relationship of Self-Efficacy to Confidence in Decision-making and Emotional Labor

Table 9 shows the relationship of self-efficacy to confidence in decision-making and emotional labor.

Table 9. Relationship of Self-Efficacy to Confidence in Decision-Making and Emotional Labor

	Confidence in Decision-Making			Surface Acting			Deep Acting			Overall Emotional Labor		
	R	*P*	VI	*r*	*P*	VI	*R*	*p*	VI	*r*	*p*	VI
Self-efficacy	0.650**	.000	S	-0.055	0.385	NS	0.145*	0.022	S	0.058	0.360	NS

*Correlation is significant at the 0.05 level; ** Correlation is significant at the 0.01 level

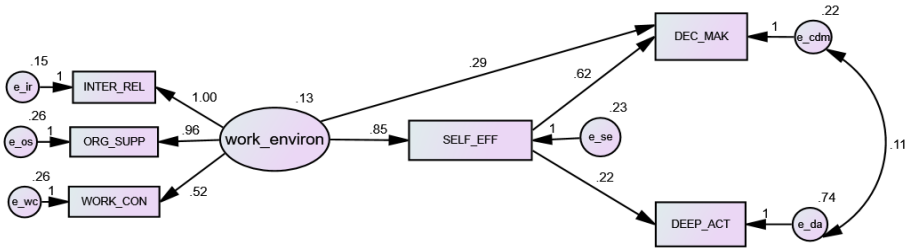
The findings indicate that self-efficacy was significantly related to confidence in decision-making (*r*=0.650** *p*= 0.000) at the 0.01 level (2-tailed). This implies that those who are competent tend to be confident in making decisions as they perform their tasks and responsibilities. The study of Reed, Mikels, Lockenhoff (2012) supports the result of the present study and revealed that deficits in self-

efficacy may impede motivation to consider multiple alternatives and to engage in thorough information seeking while making complex decisions.

Self-efficacy and emotional labor, when taken as a whole, were not significantly related (*r*=0.058 *p*=0.360). This implies that self-efficacy does not influence the regulation of emotion of the respondents. However, taken singly, emotional labor in terms of deep acting was significantly related to self-efficacy (*r=0.145 p=0.022).*This implies that the higher the nurse' self-efficacy, the higher the manifestation of deep acting. Lee and Song (2015) also confirmed that higher communication of self-efficacy was found to be correlated with empathy. Nurses who manifest deep acting are oftentimes productive, able to calm disgruntled patients, and handle negative stress well.

Based on AMOS, the final model generated (Figure 1) shows that work environment has both direct and indirect relationship with confidence in decision-making, since self-efficacy mediates their relationship. Thus, partial mediation occurs. However, work environment will only have a relationship with emotional labor in terms of deep acting through self-efficacy; thus, full mediation occurs. Welsh (2014) confirms the result by stating that supportive work environments can empower employees, heighten self-efficacy, and improve professional performance. This is done through guided mastery, effective co-workers as models, and provision of performance feedback to enhance employee's self-efficacy, emotional well-being, job satisfaction, and level of productivity as given by the organization (Bandura, 2009; Moss 2016). Xanthopoulou, Bakker, and Fischbach (2013) added that the motivational potential of self-efficacy is strengthened when demands are high. This indicates that over time, employees who face emotionally charged conditions at work deal effectively with their prescribed work roles by actively enhancing their competency level.

Mediation Effect of Self-efficacy on the Relationship of Work Environment and Sleep Quality to Confidence in Decision-Making and Emotional Labor



chisquare=7.509, df=7, p=.378
RMSEA=.017
GFI=.990

Figure 1. Modified Model Analysis Results Using AMOS

Conclusion

The respondents had a good work environment and they enjoy a harmonious relationship with their colleagues, adequate support from their organizational managers, and good working conditions. The better the work environment, the higher the self-efficacy and the confidence of nurses in decision-making. Self-efficacy partially mediates the relationship between work environment and confidence in decision-making. On the other hand, self-efficacy fully mediates the relationship between work environment and deep acting.

Recommendations

Based on the findings and conclusions of this study, the researchers propose the need to conduct the same study while including other variables such as age, years of experience, and shift work. It is also recommended to include nurses from special units such as emergency room, operating room,

critical care services, dialysis and outpatient as respondents for the study. The researchers also recommend considering other variables that may influence the nurses' confidence in decision-making.

About the Authors

John Patrick B. Flores is a Master of Science in Nursing graduate from Adventist University of the Philippines, Silang, Cavite, Philippines.

Dina D. Galang and Susy A. Jael are Chair of the Graduate Nursing Program and Dean of the College of Nursing, respectively, at the University; Jezamine De Leon is a Graduate Psychology Program faculty member, and Myrtle C. Orbon is Chair of the Psychology Department at the University.

References

Bandura, A. (2009). Cultivate self-efficacy for personal and organizational effectiveness. In E.A. Locke (Ed). *Handbook of Principles of Organization Behavior*. New York: Wiley.

Beattie, L., Kyle, S., Espie, C., & Biello, S. (2015). Social interactions, emotion and sleep: a systematic review and research agenda. *Sleep Medicine Reviews*, 24, 83-100. Retrieved from doi: 10.1016/j.smrv.2014.12.005.

Brotheridge, C. & Lee, R. (2002). Testing a conservation of resources model of the dynamics of emotional labor. *Journal of Occupational Health Psychology*, 7(1), 57-67. Retrieved from http://doi: 10.1037//1076-8998.7.1.57.

Brown, E. (2011). *Emotion matters: exploring the emotional labor of teaching*. (Unpublished Doctoral Dissertation). University of Pittsburgh, Pennsylvania. Retrieved from https://core.ac.uk/download/pdf/12207032.pdf.

Buchanan, J. (2016). Albert Bandura: Self-efficacy for agentic positive psychology. *Positive Psychology Program*. Retrieved from: https://positivepsychologyprogram.com/bandura-self-efficacy/

Cheng, C., Bartram, T., Karimi, L., & Leggat, S. (2013). The role of team climate in the management of emotional labor: implications for nurse retention. *Journal of Advanced Nursing*, 69(12), 2812-2825. Retrieved from http://doi: 10.1111/jan.12202.

Cherian, J., & Jacob, J. (2013). Impact of self-efficacy on motivation and performance of employees. *International Journal of Business and Management*, 8(14), 80-88. Retrieved from http:// doi: 10.5539/ijbm.v8n14p80.

Gosselin, J. & Maddux, J. (2003). Self-Efficacy (2003). Psychology Faculty Publications. 17. Retrieved from http://digitalcommons.sacredheart.edu/psych_fac/17

Gray, B. (2009). The emotional labor of nursing 1: Exploring the concept. *Nursing Times*, 105(8), 26-29.

Hochschild, A. (1983). *The managed heart: commercialization of human feeling.* Berkeley: University of California Press.

Hoffman, K., & Elwin, C. (2004).The relationship between critical thinking and confidence in decision-making. *Australian Journal of Advanced Nursing*, 22 (1), 8-12.

International Council of Nurses (2016). *Nurses: A force for change: Improving health systems' resilience.* Retrieved from https://www.twna.org.tw/frontend/un07_international/webPages_3/file/IND_Kit_2016.pdf.

Kasenda, R., Jael, S. (2015). *Effects of laughter on quality and hours of sleep and blood pressure among elderly in Indonesia*. AUP Research Studies Presented at the 3rd International Scholars Conference. Silang, Cavite: Adventist University of the Philippines. Retrieved from http://www.aup.edu.ph/alumni/wp-content/uploads/ Vol-19-No-1-Research-Journal-Jan-2016-1.pdf.

Kirwan, M., Matthews, A., & Scott, P. (2013). The impact of the work environment of nurses on patient safety outcomes: A multi-level modelling approach. *International Journal of Nursing Studies*, 50(2), 253-263. Retrieved from http://doi: http://dx.doi.org/10.1016/j.ijnurstu.2012.08.020.

Lee, S., & Song, S. (2015). Empathy's relationship with adult attachment, self-esteem and communication self-efficacy in nurses. *International Journal of Bio-Science and Bio-Technology*, 7 (6), 339-350.

Lings, I., Durden, G., Lee, N., & Cadogan, J. (2009). *The moderating role of self-efficacy on the relationship between emotional exhaustion and job strain for boundary spanning service employees.* In: Australian and New Zealand Marketing Academy Conference 2009, 30 November- 2 January, 2009, Melbourne, Victoria, Australia.

Mikeska, J., Hamwi, G., Friend, S., Rutherford, B., & Park, J. (2015). Artificial emotions among salespeople: Understanding the impact of surface acting. *The Marketing Management Journal*, 25 (2), 54-70.

Moss, S. (2016). Self-efficacy. *Sico-tests*. Retrieved from: www.sicotests.com/psyarticle.asp?id=224.

Purdy, N. (2011). *Effects of work environment on nursing and patient outcomes*. Electronic Thesis and Dissertation Repository. 92. Canada: University of Western Ontario. Retrieved from https://ir.lib.uwo.ca/etd/92

Ranjbaran, S., Dehdari, T., Majdabadi, M. M., Sadeghniiat-Haghighi, K. (2014). The survey of sleep self-efficacy and perceived social support status in patients with poor sleep quality after coronary bypass surgery. *Razi Journal of Medical Sciences*, 21(126), 33-42.

Reed, A., Mikels, J., & Lockenhoff, C. (2012). Choosing with confidence: Self-efficacy and preferences for choice. *Judgment and Decision-making,* 7(2), 173-180.

Seaman, N., Saban, G., Balila, J., & Barrios, R. (2016). Personal Attributes and Teaching Performance as Mediated by Core Competencies of Nurse Educators: Basis for Human Resource Training and Retention Program. *AUP Research Journal, 19*(*2*), 6-20. Retrieved from http://www.aup.edu.ph/alumni/wp-content/uploads/RJ1.pdf.

Shang, J., Friese, C., Wu, E., & Aiken, L. (2012). Nursing practice environment and outcomes for oncology nursing. *Cancer Nursing, 36(3), 206-12.* Retrieved from http:// 10.1097/NCC.0b013e31825e4293.

Stokowski, L. (2013). Nurses are talking about: Working the night shift. *Medscape*. Retrieved from https://www.medscape.com/viewarticle/777286.

Talebpour, A., Khurasghani, A., & Ghasemi, V. (2013). Investigating social factors associated with emotional labor among nurses. *Mediterranean Journal of Social Sciences*, 4(4). Retrieved from http://doi: 10.5901/ miss.2013.v4n4p369.

Theodosius, T. (2008). *Emotional labor in health care: The unmanaged heart of nursing*. 2 Park Square, Milton Park, Abingdon, Oxon: Routledge Taylor and Francis Group.

The Robert Wood Johnson Foundation (2014). Physical work environment in hospitals affects nurses' job satisfaction with implications for patient outcomes, healthcare costs. *Robert Wood Johnson Foundation*. Retrieved from https://www.rwjf.org/en/library/articles-and-news/2014/07/physical-work-environment-in-hospitals-affects-nurses-job-satisf.html.

Tsai, C. W., Tsai, S. H., Chen, Y. Y., & Lee, W. L. (2014). A study of nursing competency, career self-efficiency and professional commitment among nurses in Taiwan. *Contemporary Nurse*, 49, 96-102. Retrieved from doi: 10.5172/conu.2014.49.96.

Viejo, A. (2005). *AACN's Standards for establishing and sustaining healthy work environment. A journey to excellence*. Columbia: American Association of Critical –Care Nurses, 14(3), 187-197.

Welsh, D. (2014). Self-efficacy measurement and enhancement strategies for medical-surgical clinical nurses. *Medsurg Nursing*, 23(6), 371-377.

World Health Organization (2015). *Realising Nurses' Full Potential, Bulletin of the World Health Organisation,* (93) (9): Retrieved from www.who.int/bulletin/volumes/93/9/en/

Xanthopoulou, D., Bakker, A., & Fischbach, A. (2013). Work engagement among employees facing emotional demands: The role of personal resources. *Journal of Personal Psychology*, 12 (2), 74-84. Retrieved from http://doi: 10.1027/1866-5888/a000085.

Zverev, Y., & Misiri, H. (2009). Perceived effects of rotating shift work on nurses' sleep quality and duration. *Malawi Medical Journal*, 21(1), 19-21.