

Effects of Burnout and Nurse Job Satisfaction on the Turnover Intention among Nurses in Northern Mindanao, Philippines

RODELSA SHAIRA BALAGOT CORNITO

ORCID No. 0000-0001-6315-4865
rodelsashairacornito@gmail.com

GLORIA M. CUNANAN

ORCID No. 0000-0002-1701-894X
gloriacunanan2003@yahoo.com

Liceo de Cagayan University
Cagayan de Oro City, Philippines

ABSTRACT

This study aimed to determine the effects of burnout and job satisfaction to the turnover intention among nurses in Northern Mindanao. It intended to describe the demographic profile of at least one hundred participants, determine the levels of burnout, job satisfaction, and turnover intention of the participants. This study also identified the correlation between the aforementioned variables as well as the best predictor for turnover intention. Descriptive quantitative research design was employed for the study and purposive sampling was done in choosing the participants. The statistical tools utilized in the study were descriptive statistics, mean and standard deviation, Pearson r moment of correlation, and multiple regression. Relevant results revealed a high number of nurses with short length of employment and most of them are in young adulthood. However, the participants were undecided on their overall turnover intention. Significant findings showed that burnout and job satisfaction are strongly correlated to turnover intention. To conclude, both burnout and job satisfaction can greatly predict the rate of turnover intention among nurses.

Keywords: Northern Mindanao nurses, burnout, nurse job satisfaction, nurse turnover intention

INTRODUCTION

Where have the nurses gone? When one takes a stroll down most, if not all, of the hospitals in the Philippines, one would certainly notice the insufficient number of these hardworking medical professionals against the heaps of patients they have to take care of daily. Nurses (popularly known as the “angels of the sickroom”) comprise the bulk of the healthcare profession, supposedly, and yet, they seem to be disappearing by the day; this is because there has been substantial migration among nurses over the past decade (Labrague, Gloe, McEnroe, Konstantinos, & Colet, 2017). However, this phenomenon is no longer uncommon since one would be able to realize this through their outcry on social media, rallies against government agencies, and through ordinary conversations with them and yet, the authorities do not seem to be taking heed of their needs. If push comes to shove, then evidently, simple posts of angst on social networking sites will not suffice. After all, nowadays, everything has become evidence-based; that is to say, figures and analytical data may be necessary in order to appropriately present the deprived situation of the Filipinos nurses of today.

In recent months before this study, there had been some undesirable scenarios in the locality of Cagayan de Oro that resulted due to the issues previously mentioned. At first, people had assumed that there had been too many patients admitted in the hospitals in the City; thus, those people who had been feeling unwell (though not life-threatening) had to be turned away by the hospital staff (but not without the appropriate medical advice and proper interventions given). It was a very concerning and unbelievable scenario, further encouraging the conduct of this study. Upon probing through conversations with senior nurses in various hospitals in the same city, investigations revealed that it was not because there were too many patients that caused the problem—it was because many stations or wards in the hospitals were temporarily closed due to the apparent lack of staff nurses to man them. Thus, this incident further supplemented the need to give more importance to the continuation of this study.

In this regard, this sought to determine the effects of burnout and nurse job satisfaction on the turnover intention among today’s nurses from various hospitals in Northern Mindanao (Region X). The investigator used three sets of standardized questionnaires: the Abbreviated Maslach Burnout Inventory (McClafferty, 2014), and the other two, a questionnaire adapted from Dr. Ellen Gay Intong used in her recent dissertation (2017) and another from Rinku Titus (2012). The findings of this study will support the existing observations and

research data, albeit a few, on the significant impact of burnout and job satisfaction of Filipino registered nurses on the increase of turnover in the Philippines.

FRAMEWORK

The Multidimensional Theory of Burnout

Christina Maslach (1993, 1998) developed the framework for the Multidimensional Theory of Burnout concerning the psychological problem created by burnout in the workplace.

Maslach's viewpoint states that burnout is a multidimensional theory that is best explained and evaluated as regards its three fundamental dimensions: (1) emotional exhaustion, (2) depersonalization, and (3) reduced personal accomplishment (Buunk&Schaufeli, 1993; Maslach, 1993, 1998; Maslach & Jackson, 1981).

Emotional exhaustion is the basic component of burnout (Maslach, 1998). Maslach defined emotional exhaustion as having one's feelings overextended and depleted due to undue stress. In hospital settings, emotional exhaustion has been detected predominantly among physicians and nurses due to their highly stressful environments, role ambiguity, and increased job demands (Halbesleben, 2010; Harig, 2005; Ifeagwazi, 2006; Kane, 2009). Paynton (2008) identified nurses, among other professional groups, as extremely vulnerable to the pressures of their work environments due to their vital role in the healthcare industry. Their constant interactions with patients often involving considerable emotional and physical care further worsened this grave situation. Thus, these factors, along with personal issues and other external variables, frequently cause emotional exhaustion (Golshani, 2013).

As previously mentioned, depersonalization is the second dimension of burnout which Maslach (1998) refers to as an adverse, disparaging or extremely isolated reaction to others, and frequently contains a loss of optimism. Basically, when people experience high levels of depersonalization, they are languid and tend to interact less with people and continue with their jobs (Golshani, 2013). As indicated by Maslach (1998), "detachment can turn into dehumanization". In a nutshell, Golshani (2013) pointed out that "this dimension is the interpersonal aspect of burnout."

According to Maslach (1998), the third dimension is about having a reduced sense of personal accomplishment. This factor denotes a "decline in feelings of competence and productivity at work," which is the eventual outcome of both

emotional exhaustion and depersonalization. This dimension states that nurses no longer feel sufficient or they undergo a diminished level of self-efficacy and a perceived failure to serve patients; hence, they obtain a sense of disappointment and a loss of achievement. Thus, Maslach (1998) identifies this facet as the “self-evaluation dimension” of burnout.

Golshani (2013) described in his study that occupational burnout is experienced by individuals when they face these three dimensions (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment).

Succinctly, Maslach’s multidimensional theoretical foundation underscores the importance of environmental and organizational perspectives regarding stress and burnout experiences.

The Hackman and Oldham Job Characteristics Model

As cited by Lombardo (2013) in her article on the JCM, it was designed by Hackman and Oldham in 1972 and opines that the key to employee motivation is the job itself. For instance, a tedious and repetitive job suppresses good job performance, while a stimulating job improves motivation. Accordingly, the three ways of adding challenge to a job are “variety, autonomy and decision authority” (Oldham & Hackman, 1972).

This model states that there are five main characteristics of job motivation—skill variety, task identity, task significance, autonomy, and feedback. Lombardo (2013) further stated that according to Oldham & Hackman, by refining these dimensions, it will ultimately result in a better working environment and increased job satisfaction.

This model can explain this study regarding the job satisfaction of nurses by using the main characteristics mentioned above. Skill variety occurs when the institution provides training and seminars for the growth and advancement of its employees, if a fair chance to be able to expose their skills are given to nurses, and when their supervisor or immediate head sees to it that all employees are given an opportunity to attend conferences or seminars. Task identity happens when the nurses believe that they have the chance and opportunity to be promoted. Task significance happens when there is an adequate opportunity for periodic changes in duties. Autonomy is when the nurse can identify a high degree of independence associated with his/her work roles. Lastly, feedback occurs when the nurses receive feedback about their performance.

Herzberg’s Two-Factor Motivation-Hygiene Theory

According to the study conducted by Chu and Kuo (2015), Herzberg proposed this said theory in 1966. It revealed that there are two groups of factors in the organization: those that contribute to job satisfaction, also known as “motivation factors or motivators,” and those that contribute to job dissatisfaction, the “hygiene factors” (Herzberg, 1966). Furthermore, motivation factors comprise experience achievement, recognition, stimulating work, increased responsibility, advancement, and learning.

Herzberg (1966) asserted that motivation factors and hygiene factors are not merely opposites of each other, thus implying that an employee who is dissatisfied because of unpleasant working conditions will not necessarily become satisfied if his or her working conditions suddenly become pleasant. Additionally, Chu and Kho (2015) cited that Herzberg believed that an employee starts to respond to his or her turnover intentions appeals when the factors that are contributing to one’s overall satisfaction start to become negatively affected.

For instance, when an employee starts to believe that his or her job has become less stimulating in terms of career growth and advancement, or if his or her job is no longer thought-provoking since he or she does not receive enough recognition, then the turnover intention increases. Therefore, retention strategies should seek to optimize motivation factors in order to inhibit employees’ turnover intentions (Ngo-Henha, 2017).

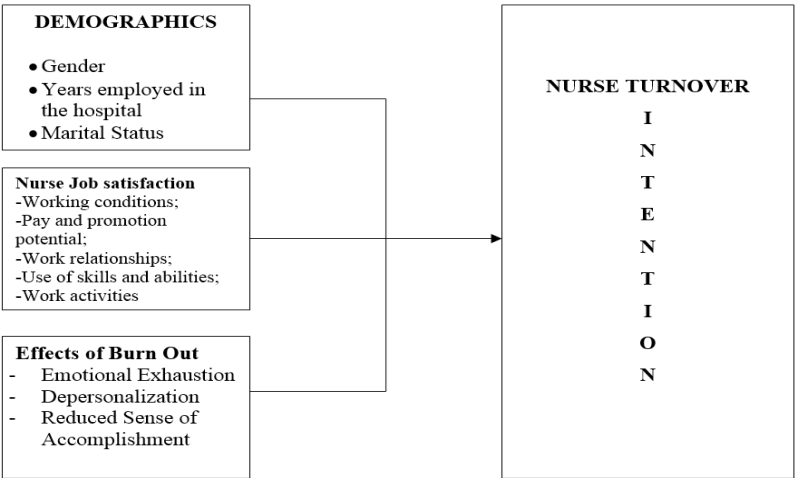


Figure 1. A schematic presentation showing the interplay of the independent variables and dependent variables

OBJECTIVES OF THE STUDY

This study sought to determine the extent of burnout rate among registered nurses in Northern Mindanao and its significant relationship to the participants' job satisfaction and subsequent nurse turnover intention. Specifically, it aimed to determine; (1) the demographic profile of the participants in terms of age, gender, marital status and years of employment in the hospital; (2) the level of job satisfaction among the participants in terms of working conditions, pay and promotion potential, work relationships, use of skills and abilities and work activities; (3) the level of burnout among the participants in terms of emotional exhaustion, depersonalization; and sense of personal achievement; (4) the level of turnover intention among the participants; (5) If there is a significant relationship between nurse turnover intention and nurse job satisfaction, level of burnout and demographic profile; and (6) which of the abovementioned variables best predict the nurse turnover intention.

METHODS

The public and private secondary and tertiary hospitals across various cities and towns in Region X (Northern Mindanao) were included in the scope of this study, namely: the Cities of Cagayan de Oro, Iligan, and Ozamis; and the Municipalities of Manolo Fortich, Lala, and Kapatagan.

This research utilized the Descriptive Correlation Research Design since this study gathered answers to questions on burnout, nurse job satisfaction, and turnover intention in order to satisfy the curiosity about how the levels of burnout and job satisfaction among nurses in Northern Mindanao influenced their turnover intention. Burns and Grove (2009) stated in their book that "a descriptive design may be used to develop theory, identify problems with the current practice, justify current practice, make judgments, or determine what others in similar situations are doing." The investigator utilized a four-part questionnaire tool.

The participants in this study were registered nurses employed either in public or private hospitals in the above locations. The purposive sampling procedure was utilized in getting the sample population of the study as it purposefully needed registered nurses working in either public or private and secondary or tertiary hospitals as participants.

Location	Number of Participants	Percentage
Municipality of Manolo Fortich	25	20.50 %
Cagayan de Oro City	24	19.70 %
Iligan City	34	27.90 %
Ozamis City	10	8.20 %
Municipality of Lala	17	13.90 %
Municipality of Kapatagan	12	9.80 %
Total	122	100 %

This study used a four-part questionnaire. The first part contained compulsory questions regarding the demographics of the participants (age, gender, marital status, and years of employment). The second part used the Minnesota Satisfaction Questionnaire (MSQ) Short-Form created by Weiss, Dawis, George and Loyd (1977) which measured the job satisfaction of the participants. This questionnaire, provided freely by the Vocational Psychology Research, University of Minnesota, was designed to measure an employee's job satisfaction and affords more specific information on the characteristics of a job that an employee finds satisfying.

This questionnaire used the following Likert Scale:

Score	Scale	Verbal Description	Interpretation
5	4.50 – 5.0	Highly Satisfied	means I am very satisfied with this aspect of my job.
4	3.50– 4.49	Satisfied	means I am satisfied with this aspect of my job.
3	2.50– 3.49	Neither Satisfied or Dissatisfied	means I can't decide whether I am satisfied or not with this aspect of my job.
2	1.50– 2.49	Not Satisfied	means I am not satisfied with this aspect of my job.
1	1.0– 1.49	Highly Not Satisfied	means I am very dissatisfied with this aspect of my job.

The third part featured the Abbreviated Maslach Burnout Inventory taken from a study by McClafferty (2014).

Assigned specific values and were scored as follows:

Dimension	Values	Description	Interpretation
Emotional Exhaustion	0-3	Very Low Level	<i>Higher scores indicate greater emotional exhaustion, and greater burnout.</i>
	4-7	Low Level	
	7-11	Moderate Level	
	12-16	High Level	
	17-21	Very High Level	
Depersonalization	0-3	Very Low Level	<i>Higher scores indicate greater depersonalization, and greater burnout.</i>
	4-7	Low Level	
	8-11	Moderate Level	
	12-16	High Level	
	17-21	Very High Level	
Personal Accomplishment	0-3	Very Low Level	<i>Higher scores indicate greater personal accomplishment, and less burnout.</i>
	4-7	Low Level	
	8-11	Moderate Level	
	12-16	High Level	
	17-21	Very High Level	

The fourth and final part was a 9-item scale from Rinku Titus (2012) in measuring the turnover intention which used the following scales:

Score	Scale	Verbal Description	Interpretation
5	4.50 – 5.0	Strongly Agree	means I am extremely convinced with this statement.
4	3.50– 4.49	Moderately Agree	means I am convinced with this statement.
3	2.50– 3.49	Neither agree or disagree	means I neither believe nor disbelieve this statement.
2	1.50– 2.49	Moderately Disagree	means I am not convinced with this statement.
1	1.0– 1.49	Strongly disagree	means I am extremely unconvinced with this statement.

The partial questionnaire underwent pilot testing with approximately sixteen (16) nurses from various hospitals which were not part of the study. The outcome became the basis for revision and correction to assure validity and reliability.

The ensuing pilot-test yielded a result of 100% reliability with a Cronbach's Alpha of 0.804 using thirty-six (36) items.

Research Protocol

To ensure the quality and research findings, the investigator observed the following University Protocol. The investigator sought approval from the adviser after careful assessment and review of the manuscript for the thesis paper. The Dean of the School of Graduate Student approved the schedule for the defense of the thesis proposal after a thorough assessment and review of the manuscript. After the panel approved the paper, it was then submitted to the research and Publication office for Plagiarism and Grammarly Test. The Associate Director of the Research and Publication reviewed the proposal and Research Ethics Form for the study's completeness and for compliance with the University format and guidelines. The investigator wrote letters and secure permission from the hospitals involved in the study. The investigator also secured the participants' consent to participate in the study. Moreover, the participants were assured that all their responses would be treated with utmost confidentiality. Provision of the final manuscript. The investigator provided the adviser the copy of the manuscript for the assessment and review of the quality and relevance of the paper before the scheduling of the final research presentation. Once the adviser approved the paper, it was forwarded to the Graduates Studies Research Coordinator for further review of the completeness of the paper. The coordinator then met with the dean for the scheduling of the paper presentation. After the final paper presentation, the investigator incorporated all the corrections and suggestions of the Research Panel. The adviser and the panel members then reviewed the revisions. After the panel approved the paper, it was then submitted to the research and Publication Office for Plagiarism and Grammarly Tests. The investigator then forwarded the final paper to their assigned editor. After incorporating all the corrections, the investigator submitted the final paper to the adviser and Research Panel for signature and approval for binding.

The following were the steps in gathering the data for the conduct of the study: First, a letter granting permission to conduct the study was submitted to the Dean of the School of Graduate Studies for approval. A similar letter addressed to the Vice President for Research, attached to the study's Research Ethics. Next, the signed letter was scanned, reproduced and sent to the chosen hospitals for the study. Once permitted by the Medical Director or Chief Nurse of the hospitals, a courtesy call was made to the former. After this, the participants were oriented on the purpose of the study and the confidentiality of the gathered data and their identities, together with the hospital's names. The investigator started to interview and gave the questionnaires to the registered nurses in the said hospital

who have been allowed to do so by the corresponding head nurse. All the survey questionnaires were then gathered at the end of the day.

The following statistical tools were utilized to facilitate the analysis of the interpretation:

Problem 1 was processed by using descriptive statistics such as frequency and percentage distribution.

Problems 2, 3, and 4 utilized the mean and standard deviation.

Problem 5 used the Pearson product moment correlation for the significance of the relationship.

Problem 6 used Multiple Regression to identify the variable that best causes turnover intention.

RESULTS AND DISCUSSION

Various individual studies across the world about burnout, job satisfaction, and turnover intention, either separately or a combination of two of these or one of the above and another different variable, have given numerous relevant input on the unfortunate situation of nurses today. It is, however, still of utmost importance to further the study on these variables altogether in order to help shed light on other relevant data. Some data in this study may or may not significantly impact the current status of nurses and thus should be investigated more thoroughly through a set of statistical tools.

The researcher has gathered the following data using four sets of questionnaires each with a different purpose: to describe the demographic profile of the participants of the study; to measure their levels of job satisfaction in their current organization; to quantify their levels of burnout in terms of the three dimensions categorized by Maslach (1993); and to determine the turnover intention of the participants. The overall number of participants were expected to be at least 100, but the researcher was able to gather a total of 122 participants for the study. The participants were randomly chosen from both secondary and tertiary hospitals across three cities and three municipalities within the scope of Northern Mindanao. The identities of the nurses, as well as the hospitals where they are currently employed, were not noted for confidentiality purposes; however, a letter of consent was given to each respondent to read before agreeing to answer the survey form.

Objective 1: To determine the demographic profile of the participants in terms of age, gender, marital status, and years of employment in the hospital.

Table 1

Demographic Profile of Participants

Variable	Frequency	Percentage Distribution
Age		
21-25 years old	30	24.59
26-30 years old	57	46.72
31-40 years old	27	22.13
41 years and above	8	6.56
Gender		
Female	103	84.43
Male	19	15.57
Marital Status		
Single	78	63.93
Married	44	36.07
Years of Employment		
Below 1 Year - 2 Years	63	51.64
3-5 Years	32	26.23
6 Years and More	27	22.13

In Table 1, 46.72% or nearly half of the number of participants were mostly between the ages of twenty-six to thirty years. Of the one hundred twenty-two (122) participants, one hundred three (103) were female. Of the four identified marital status categories, two were excluded because none answered them (i.e., legally separated, widowed). However, a vast majority of them, 63.93% in total, were single. Interestingly, 51.64% of the total number of participants, approximately more than half of the 122 participants, were revealed to have a length of employment in their current organization of two (2) years and less.

The age bracket 26-30 years old has the highest number of participants and may relate to the time when studying nursing became an educational trend in the Philippines during the early 2000s. Accordingly, a local study by Arends-Keunung et al. (2015) opined that the Philippine nursing educational system had been designed to meet international nursing care standards, thus making the country seemingly well-positioned to respond to increased demand for nurses overseas. Consequently, most of the private educational sector rapidly expanded in the mid-2000s with new nursing programs to accommodate the influx of aspiring nursing students (Arends-Keunung et al., 2015). Thus, those who may have studied nursing during this demanding decade might already be in their late twenties as of date.

Though not entirely true, it is generally accepted that women are considered to be more inclined to the caring profession. In the olden days, women were usually assigned tasks that were not aligned to physical strain—that is to say, those jobs that did not require “manly” strength. This kind of obsolete mentality seemed to have carried on to today’s current careers. In the past decades, many notable women like Florence Nightingale and, the local Filipino ‘Nightingale,’ Nazaria Lagos, have raised the bar on the power of female-led healthcare. Therefore, it seems unsurprising that most of the participants in this study, 84.43% of the total sample, consisted of women (though the participants were given the survey forms regardless of gender). Labrague et al. (2018) is a direct and significant link between organizational commitment and female nurses who reported higher levels of work commitment. Meadus and Twomey (2007) declared that females have more commitment in their organization which influences the profession of nursing since the latter needs a life-long commitment and dedication.

More than half of the total sample, 63.93% to be precise, revealed to be single. This result may be due to the increasingly popular belief that “millennials” (those who are in their mid-twenties to early thirties) are more inclined to stay single during early to middle adulthood to pursue careers, travel for pleasure, and the like without the need to think about familial responsibility. Harbron (2017) wrote an article published on *Scrubs*, an online magazine for nurses, suggesting that being a single nurse definitely has its advantages since he or she can really take the time to focus on his or her interests or professional growth, do the things he or she enjoys, and appreciate his or her independence from any relationship.

Upon further analyzing Table 1, the investigator was able to point out that majority of the participants were from the ages of 21 to 30 years and a high percentage of these participants, 51.64%, have worked for their respective hospitals equal to or less than two years. This result may have a number of different reasons. First, many of them may have worked for very different careers before applying for their current employer. It is relevant to note that in the previous discussion, there had been an oversupply of nurses—this phenomenon led to them working for Business Processing Outsourcing (BPO) companies or other employers (i.e., pharmaceutical companies, online teaching tutorial schools, airline companies) before eventually going back to the nursing profession. Another reason could be that some were employed in other medical institutions: either an upgrade (from a low-bed capacity hospital to a higher level hospital) or the opposite. However, another imminent possibility for this low number of years of employment would be that many of them are only looking to work for the said hospital for one to

two years before proceeding to work in hospitals abroad, which usually require at least one to two years of hospital experience.

Several research (Schwab & Iwanicki, 1982; Brissie, Hoover-Dempsey, & Bassler, 1998; Dworkin, 1987) has supported the reason why nurses have shorter lengths of employment by saying that workers with less experience underwent higher levels of burnout than their more experienced colleagues, probably prompting them to leave their present organization earlier than expected. Additional research by Simons and Jankowski (2008) suggested that salary is positively related to the intent to have a longer employment in the said institution, which is actually one of the most infamous reasons why nurses leave—basically due to its insufficiency.

Objective 2: To determine the levels of job satisfaction among the participants in terms of working conditions, pay and promotion potential, work relationships, use of skills and abilities, and work activities.

Table 2

Levels of Job Satisfaction Among the Participants

Variable	Mean	Standard Deviation	Interpretation
Working Condition			
Hours worked each week	3.76	0.95	Satisfied
Flexibility in schedule	3.50	0.98	Satisfied
Location of work	4.10	0.83	Satisfied
Amount of paid vacation time/sick leave offered	2.66	1.16	Neither Satisfied or Dissatisfied
Pay And Promotion Potential			
Salary	2.67	1.19	Neither Satisfied or Dissatisfied
Opportunities for promotion	2.69	1.08	Neither Satisfied or Dissatisfied
Benefits (Health insurance, life insurance, etc.)	2.69	1.16	Neither Satisfied or Dissatisfied
Job security	2.81	1.15	Neither Satisfied or Dissatisfied
Recognition for work accomplishment	3.07	1.01	Neither Satisfied or Dissatisfied
Work Relationship			
Relationship with your co – workers	4.16	0.59	Satisfied
Relationship with your superiors	3.86	0.87	Satisfied
Relationship with your subordinates	4.07	0.61	Satisfied
Use Of Skills And Abilities			
Opportunity to utilize your skills and talents	3.89	0.78	Satisfied
Opportunity to learn new skills	3.80	0.97	Satisfied
Support for additional training and education	3.28	1.13	Neither Satisfied or Dissatisfied

Table 2 Continued

Variable		Mean	Standard Deviation	Interpretation
Work Activities				
Variety of job responsibilities		3.66	0.86	Satisfied
Degree of independence associated with your work roles		3.84	0.71	Satisfied
Adequate opportunity for periodic changes in duties		3.57	0.94	Satisfied

Legend :			
Score	Scale	Verbal Description	Interpretation
5	4.50 – 5.0	Highly Satisfied	means I am very satisfied with this aspect of my job.
4	3.50 – 4.49	Satisfied	means I am satisfied with this aspect of my job
3	2.50 – 3.49	Neither Satisfied or Dissatisfied	means I can't decide whether I am satisfied or not with this aspect of my job.
2	1.50 – 2.49	Not Satisfied	means I am not satisfied with this aspect of my job.
1	1.0 – 1.49	Highly Not Satisfied	means I am very dissatisfied with this aspect of my

Table 2 highlights the eighteen sub-variables comprising the five main variables under job satisfaction (working condition, pay and promotion potential, work relationship, use of skills and abilities, and work activities). Of the five given working conditions, the participants seemed to be satisfied with the location of work ($=4.0984$). For pay and promotion potential, the participants were generally neither satisfied nor dissatisfied with any of the sub-variables but found recognition for work accomplishment as the most relevant ($=3.0656$) among the others. Work relationships, especially with co-workers ($=4.1557$), gave satisfaction to the participants. For the use of skills and abilities, the majority of the participants were satisfied with the opportunity to utilize their skills and talents ($=3.8934$). For work activities, many of the participants felt a sense of satisfaction with regards to their degree of independence associated with their work roles ($=3.8361$).

The satisfaction level related to one's location of work may be based on certain pretexts such as the geographical location of the hospital where the nurse is employed. It may be accessible to the nurse due to the easy use of transportation or merely because it is where the nurse is currently residing. Another possible reason would be the safety and order situation of the workplace. Possibly the area where these nurses are working in is not prone to any war-induced danger or natural disasters.

The nurses have ambivalent feeling about the pay and promotion potential, especially on the recognition for work accomplishment, due to the managerial and financial policies of the institution as well as the deficient manner in which the hospital administration gives proper recognition to its hardworking (and, mostly, overworked) nurses.

Despite this, nurses are still able to find pleasure in their job with the help of their co-nurses. Being able to communicate their feelings, particularly about

challenging procedures to handle, and personal grievances (which may be related to difficult patients and their family members) to their colleagues eases up the strain on the nurse. Sharing similar experiences also allows the nurse to feel empathy towards their coworkers who are also as tired as they are.

Finally, nurses seem to be quite satisfied with their career when they are given ample chances to do critical-thinking and decision-making activities without (too much or unneeded) supervision from his or her superiors. Too much supervision can impede the learning experience of the nurse and may also hinder the growth of his or her confidence in nursing care.

In a study by Raziq and Maulabakhsh (2015), it was explained that in order to increase competence, efficacy, output and job commitment of employees, the organization must satisfy the needs of its workers by providing decent working conditions. They furthered by stating that there is a positive relationship between the working environment and employee job satisfaction.

Jones (2004) studied a group of registered nurses who reported that sufficient time to perform adequate nursing care, appropriate staffing (good nurse-to-patient ratio), and incentives such as pay and benefits were the most common factors influencing how satisfied they were with the job (Suelo, 2014).

Nelson (2013) stated in his study that nurses who had nurse leaders who practiced transformational leadership were more probable to declare high levels of satisfaction with professional growth (Malloy & Penprase, 2010).

In a study by Lorber and Savic (2012), they believed that the goal of every employee is to acquire a job that matches their skills and interests as much as possible, enables them to achieve personal success, and provides them with opportunities for promotion. Moreover, their study revealed that satisfied employees tend to be more productive and committed to their organization. Furthermore, a “direct correlation was shown between staff satisfaction and patient satisfaction in health care organizations” (Lorber & Savic, 2012).

Objective 3: To determine the current levels of burnout among the participants, in terms of emotional exhaustion, depersonalization, and sense of personal achievement.

Table 3

Level of Burnout Among the Participants

Variable		Mean	Standard Deviation	Interpretation
Emotional Exhaustion (EE)				
1.	I feel emotionally drained from my work.	5.07	1.59	High Level
2.	I feel fatigued when I get up in the morning and have to face another day on the job.	4.97	1.68	
3.	Working with people all day is really a strain for me.	3.34	1.82	
Overall Mean		4.46	1.70	
Depersonalization (D)				
4.	I feel I treat some patients as if they were impersonal objects.	1.89	1.50	Low Level
5.	I've become more insensitive towards people since I took this job.	2.03	1.48	
6.	I don't really care what happens to some patients.	1.37	1.01	
Overall Mean		1.76	1.33	
Sense of Personal Accomplishment (SPA)				
7.	I deal very effectively with the problems of my patients.	6.07	1.15	Very High Level
8.	I feel I'm positively influencing other people's lives through my work.	6.04	1.09	
9.	I feel inspired after working closely with my patients.	6.12	1.19	
Overall Mean		6.08	1.14	
Legend				
Dimension	Values	Description	Interpretation	
Emotional Exhaustion	0-3	Very Low Level	Higher scores indicate greater emotional exhaustion, and greater burnout.	
	4-7	Low Level		
	7-11	Moderate Level		
	12-16	High Level		
	17-21	Very High Level		
Depersonalization	0-3	Very Low Level	Higher scores indicate greater depersonalization, and greater burnout.	
	4-7	Low Level		
	8-11	Moderate Level		
	12-16	High Level		
	17-21	Very High Level		
Personal Accomplishment	0-3	Very Low Level	Higher scores indicate greater personal accomplishment, and less burnout.	
	4-7	Low Level		
	8-11	Moderate Level		
	12-16	High Level		
	17-21	Very High Level		

Table 3 shows a high level of emotional exhaustion among the participants with a mean equal to 13.39; a low level of depersonalization equal to 5.30; and a very high level of a sense of personal accomplishment equal to 18.21.

Experiencing high levels of emotional exhaustion may indicate great burnout among the participants. This implies that nurses often feel emotionally drained, fatigued, and strained from working with patients all day. Contrariwise, exhibiting a low level of depersonalization means that despite the emotional burnout being felt by the nurses, they are still able to treat their patients professionally, are sensitive towards their patients' needs, and show genuine care for them, too. Fortunately, the results showed a very high level of having a sense of personal accomplishment among the nurses which means that though they are emotionally drained with their job, they can still deal with the problems of their patients effectively, they feel that they are positively influencing the lives of others through their work, and they also feel inspired after working closely with their patients in spite of their daily hardships.

In recent years, the lack of nurses in different healthcare facilities has become a contributing factor to nursing burnout (Slade, 2013). Burnout is associated to the reasons why nurses leave their jobs due to their experiences of moral distress (Stutzer, 2013). According to several researchers, the possible nursing shortage in the next two decades will be the consequence of the drop in nursing instructors (Ganley & Sheets, 2009), an aging workforce (Heinrich, 2001), and, the most important of all, stress and dissatisfaction with the nursing profession itself (Aiken, Clarke, & Sloane, 2002; Takase, Maude, & Manias, 2005).

Unfortunately, the working conditions for nurses were found to be uncondusive in safe and high-quality patient-centered care (McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011).

In 2011, researchers at the Penn State of Nursing (McHugh et al., 2011) conducted a study and surveyed 95,000 nurses in 614 U.S. hospitals and other healthcare settings. The findings indicated that nurses employed in direct patient care were statistically more likely than nurses employed in other settings to express dissatisfaction with their jobs and to report feelings of burnout. Similarly, 34 % of hospital nurses and 37 % of nurses employed in nursing home expressed feelings of burnout, as compared to 22 % in other settings (Slade, 2013). Stutzer (2013) indicated in his research that the nurse's workload implicated to both burnout and moral distress.

Objective 4: To determine the level of turnover intention among the participants.

Table 4

Level of Turnover Intention among the participants

Variable	Mean	Standard Deviation	Interpretation
I feel emotionally drained.	3.30	1.11	Neither agree or disagree
I feel used up.	3.19	1.23	Neither agree or disagree
I feel tired before work.	3.07	1.23	Neither agree or disagree
I feel burn out from my work.	3.38	1.02	Neither agree or disagree
I become less interested in my work.	2.46	1.05	Moderately disagree
I doubt the significance of my work.	2.23	1.05	Moderately disagree
I often think quitting my present job.	2.69	1.25	Neither agree or disagree
I will probably look another job next year.	2.54	1.34	Neither agree or disagree
As soon as possible, I will leave the organization.	2.25	1.18	Moderately disagree
Overall Mean	2.79	1.16	Moderately disagree
Score	Scale	Verbal Description	Interpretation
5	4.50 – 5.0	Strongly Agree	means I am extremely convinced with this statement.
4	3.50 – 4.49	Moderately Agree	means I am convinced with this statement.
3	2.50 – 3.49	Neither agree or disagree	means I neither believe nor disbelieve this statement.
2	1.50 – 2.49	Moderately Disagree	means I am not convinced with this statement.
1	1.0 – 1.49	Strongly disagree	means I am extremely unconvinced with this statement.

Table 5 underscores the feeling of burnout equal to 3.38 as the sub-variable that has the highest mean among all the others; however, it is important to note that the participants are indecisive towards this finding since it generally implies that many of them neither agree or disagree on the above indicator. Another notable result is the indicator with the lowest mean equal to 2.23, which is the one suggesting doubt in the significance of one's work. Furthermore, the participants moderately disagree with this statement.

Surprisingly, many of the findings indicated that the participants feel ambiguous regarding their overall intention to leave the hospital. This result may have resulted due to various causes. Though their overall emotional burnout is high, their sense of accomplishment in their profession may have kept their ideas of leaving the hospital at bay. This is supported by the very minimal mean value for doubting one's significance of work. This finding means that nurses know and believe in the importance of their vocation in healthcare and thus moderately disagree with this statement. Some, of course, may have felt some doubts due to

the lack of support from the organization on their welfare as nurses.

According to a foreign study conducted by Han, Sohn, and Kim (2009), nurse turnover intention was related to various aspects such as “self-efficacy, nursing performance, job satisfaction, length of employment and duration of employment in current workplace, stress, and burnout” among others. Subsequently, the central predicting factors for nurse turnover intention were burnout, stress, duration of employment in the current workplace, self-efficacy and nursing performance which explained 51.6% of turnover intention in their study’s results (Han et al., 2009).

Objective 5: To determine if there is a significant relationship between nurse turnover intention, nurse job satisfaction, level of burnout and demographic profile of the participants.

Ho1: There is no significant relationship between nurse turnover intention, nurse job satisfaction, level of burnout and demographic profile of the participants.

Table 5

Relationships Between Turnover Intention and Age, Gender, Marital Status, Employment, Job Satisfaction, Burnout

	Pearson Correlation	Sig. (2-tailed)	Interpretation
Age	-.081	.378	Not significant
Gender	-.123	.177	Not significant
Marital Status	-.183*	.044	Significant
Years of employment	.100	.272	Not significant
Job Satisfaction	-.512**	.000	Significant
Burnout	.411**	.000	Significant

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows the correlation between each of the variables presented in the study. There is a significant relationship between turnover intention and marital status ($r = -0.183$), turnover intention and burnout ($r = 0.411$), and turnover intention and job satisfaction ($r = -0.512$).

Marital status is negatively correlated to turnover intention in this study since many married nurses are more apt to stay in their current organizations due to the need for stability. Thus, there is low turnover intention among married nurses.

Married staff nurses are more concerned about job tenure than single ones, about monthly salaries, health benefits, work promotions, and similar employment characteristics; this is because married staff nurses are projected to have families to support. Hence, if the factors of motivation are operating well, “married nurses become satisfied, committed to work, and will eventually stay longer in the organization” (Tourangeau & Cranley, 2012).

Maslach et al. (2001) have stated that there is an inverse relationship between job satisfaction and burnout ($r = -.40$ to $-.52$) which means that burnout and job dissatisfaction are negatively related. This means that the more the nurses are satisfied with their job, the lesser the burnout. Likewise, job satisfaction is also negatively related to turnover intention. This implies that the higher the job satisfaction, the lesser the turnover intention. The rest of the variables are not correlated with turnover intention. Thus, the null hypothesis that there is no significant relationship between turnover intention and job satisfaction and burnout is rejected.

Objective 6: To determine which of the variables best predict the nurse turnover intention among the participants.

Ho2: There is no variable that can best predict the nurse turnover intention.

Table 6

Regression Analysis of Turnover Intention against Age, Gender, Marital Status, Years of Employment, Job Satisfaction, and Burnout

Predictor	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	T	P
Constant	33.864	6.387		5.302	0.000
Age	-1.301	1.008	-0.136	-1.291	0.199
Gender	-2.009	1.672	-0.090	-1.202	0.232
Marital Status	-2.265	1.588	-0.134	-1.426	0.157
Years of Employment	1.367	0.862	0.136	1.585	0.116
Job Satisfaction	-0.305	0.055	0.313	-5.539	0.000
Burnout	0.434	0.104	-0.419	4.192	0.000
R-Sq= 40.4%		F-value= 12.975	P-value=0.000		

Table 7 shows the multiple regression analysis on Nurse Turnover Intention against age, gender, marital status, employment, job satisfaction, and burnout. The best predictors of Nurse Turnover Intention are burnout with the largest beta weight equal to -0.419 followed by job satisfaction with a beta weight of 0.313. Thus, the null hypothesis that there is no variable that predicts turnover intention is rejected.

Furthermore, the R2 value indicates that 40.4% of the turnover intention is attributed to job satisfaction and burnout. The other 59.6% of the differences is attributed to other factors not included in the study.

Thus, the regression equation for this model is: $\hat{y} = 33.864 + 0.343 X_1 + 0.305 X_2$

where: \hat{y} = turnover intention
 X_1 = job satisfaction
 X_2 = burnout

As expected, job satisfaction and burnout of nurses greatly influence the turnover intention of nurses to leave the organization that they are currently employed in.

According to local studies by Labrague et al. (2017) and Castro-Palaganas et al. (2017), the reasons why numerous Filipino nurses decide to migrate are related to low salary, lack of benefits, lack of learning programs and opportunities for professional growth, and the high nurse-patient ratios.

Nelson (2013) stated in his study that nurses who had nurse leaders who practiced transformational leadership were more probable to declare high levels of satisfaction with professional growth (Malloy & Penprase, 2010).

Nurses experience risky and potential dangers in their daily tasks (Le Moual, Carsin, Siroux, Radon, Norback, Toren, & Zock, 2014). They also encounter a high amount of emotional exhaustion in the nursing field since it entails frequent personal contact with patients (Zellmer, 2005). Moreover, studies by other researchers explained that there is a definite link between job demands like work overload or time pressures and high emotional exhaustion (Demerouti, Bakker, Nechreiner, and Schaufeli, 2001).

It should be noted that despite affecting turnover intention together, there is an opposite relationship between the predictors, job satisfaction and burnout. Nevertheless, job dissatisfaction may still exacerbate consequent burnout experiences thus making the relationship somewhat cyclical (Bosley, 2004).

CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn. The participants are mostly single and female nurses who are between the ages of twenty-six to thirty years and are still in the early years of their employment in their current institution. With regards to the job satisfaction among the participants, they are more likely to be most satisfied with the accessible location of their workplace, their good working relationship with their co-workers, the number of opportunities to utilize their skills and talents at work, as well as the high degree of independence associated with their work roles. Upon carefully examining the levels of burnout among the participants, many of them experience high emotional exhaustion; nonetheless, they do not exhibit depersonalization or the state of having low sensitivity or empathy towards others. What is more significant in the study was that despite feeling high emotional exhaustion, the nurses still express a very high level of having a sense of personal accomplishment in their service to others. There is a significant relationship between many variables in the study but the most remarkable would be the strong and significant relationships between job satisfaction and turnover intention and burnout and turnover intention. Therefore, the study has proven that there burnout and (low) job satisfaction can both strongly influence a nurse's turnover intention.

LITERATURE CITED

- Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organizational support, and quality care: Cross-national findings. *International Journal for Quality in Health Care*, 14, 5-13. doi:10.1093/ntqhc/14.1.5
- Arends-Keunuing, M., Calara, A., & Go, S. (2015). International migration opportunities and occupational choice: A Case Study of Philippine Nurses 2002 to 2014. Retrieved from <http://ftp.iza.org/dp8881.pdf>
- Bosley, H. (2004). Levels of burnout and job satisfaction in large-scale agribusiness. Retrieved from <https://digitalcommons.wku.edu/cgi/viewcontent.cgi?article=2109&context=theses>

- Brissie, J. S., Hoover-Dempsey, K. V., & Bassler, O. C. (1998). Individual, situational contributors to teacher burnout. *The Journal of Educational Research*, 82(2), 106– 112. doi: 192.168.72.224.
- Burns, N., & Grove, S. K. (2009). *The practice of nursing research* (6th ed.). St. Louis: Saunders
- Buunk, B.P. & Schaufeli, W.B. (1993). Professional burnout: a perspective from social comparison theory. In *Professional Burnout: Recent Developments in Theory and Research*. Washington, D.C.: Taylor & Francis.
- Castro-Palaganas, E., Spitzer, D.L., Kabamalan, M.M., Sanchez, M.C., Caricativo, R., & Runnels, V. (2017). An examination of the causes, consequences, and policy responses to the migration of highly trained health personnel from the Philippines: the high cost of living/leaving—a mixed method study. *Human Resources Health* 15 (1), pp 25.
- Cherniss, C. (1992). Long-term consequences of burnout: An exploratory study. *Journal of Organizational Behavior*, 13(1), 1–11. Retrieved from <https://doi.org/10.1002/job.4030130102>
- Chu, H.C., & Kuo, T.Y. (2015). Testing Herzberg's Two-Factor Theory in Educational Settings in Taiwan. *The Journal of Human Resource and Adult Learning*, 11 (1), pp.54-65.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499-512.
- Dworkin, A. G. (1987). *Teacher burnout in the public schools: Structural causes and consequences for children*. Albany: State University of New York Press.
- Ganley, B., & Sheets, I. (2009). A strategy to address the nursing faculty shortage *Educational Innovations*, 48(7), 401-405. Retrieved from <http://www.healio.com/nursing/journals>

- Golshani, A. (2013). Investigating the relationship of burnout to gender, personality traits, and self-care strategies in licensed marriage and family therapists and marriage and family therapist trainees and interns (Order No. 3557964). Available from ProQuest Dissertations & Theses Global. (1347260101). Retrieved from <https://search.proquest.com/docview/1347260101?accountid=139409>
- Goutas, L. (2008). Burnout. The Journal of European Medical Writers Association, 17(3).
- Halbesleben, J. (2010). The role of exhaustion and workarounds in predicting occupational injuries: A cross-lagged panel study of health care professionals. *Journal of Occupational Health Psychology*, 15(1), 1-16. doi:10.1037/a0017634.
- Han, S., Sohn, I., & Kim, N. (2009). New nurse turnover intention and influencing factors. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20071901>
- Harig, P. T. (2005). Stress management: A guide for senior leaders. Retrieved from <http://www.hooah4health.com/mind/stressmgmt/stressmindbody3.htm>
- Harkins, P. J. (1998). Why employees stay or go, *Workforce*, 77 (10), pp. 74-78.
- Hechanova, E. (2004). Job satisfaction and retention of nurses in malaybalay city: a basis for interfacing session, pp.56-57.
- Heinrich, J. (2001). Nursing workforce: Emerging nurse shortages due to multiple factors (GAO-01-944). Washington, DC: U.S. General Accounting Office.
- Herzberg, F.I. (1966). Work and the nature of man.
- Jones, C. (2004). *Factors that contribute to nursing job satisfaction at valley hospital* (Unpublished Master's thesis). University of Nevada Las Vegas, Las Vegas, Nevada..Retrieved from <http://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=1424&context=thesesdissertations>

- Kane, P. P. (2009). Stress causing psychosomatic illness among nurses. *Indian Journal of Occupational and Environment Medicine* 13(1). 28-32
Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2822165/>
- Labrague, L., Gloe, D., McEnroe, D., Konstantinos, K., & Colet, P. (2017). *Factors influencing turnover intention among registered nurses in Samar Philippines*. Retrieved from <https://doi.org/10.1016/j.apnr.2017.11.027>
- Labrague, L.J., McEnroe-Petitte, D.M., Gloe, D., Tsaras, K., Arteché, D.L., & Mardia, F. (2017). *Organizational politics, nurses' stress, burnout levels, turnover intention and job satisfaction*. *IntNurs Rev* 64 (1), 109-16.
- Le Moual, N., Carsin, A., Siroux, V., Radon, K., Norback, D., & Toren, K., ... Zock, J. (2014). *Occupational exposures and uncontrolled adult-onset asthma in the European community. Respiratory Health Survey II*. 43(2), 374-386. doi: <https://doi.org/10.1183/09031936.00034913>
- Lorber, M., & Savic, B. K. (2012). Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian hospitals. *Croatian Medical Journal*, 53, 263-270.
- Malloy, T., & Penprase, B. (2010). Nursing leadership style and psychosocial work environment. – *Journal of nursing environment*, 18 (6), 715-725. doi:10.1111/j.1365-2834.2010.01094.x.
- Maslach, C., & Jackson, S. (1981). *Maslach burnout inventory - human services survey (mbi-hss) - Assessments, Tests | Mind Garden - Mind Garden*. Retrieved from <https://www.mindgarden.com/314-mbi-human-services-survey>
- Maslach, C., & Jackson, S.E. (1981). *The Maslach burnout inventory*. Research edition. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C. (1993). *Burnout: a multidimensional perspective*. In W.B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: recent development in theory and research* (pp. 19-32). Washington, D.C.: Taylor & Francis.

- Maslach, C., Jackson, S.E., & Leiter, M.P (1996). *Maslach burnout inventory manual*, Third Edition, Mountain View, California.
- Maslach, C. (1998). *A Multidimensional Theory of Burnout*. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 68-85). Oxford, England: Oxford University Press.
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). *Job burnout*. *Annual Review in Psychology*, 52, 397-422.
- McClafferty, H. (2014). *Abbreviated maslach burnout inventory*. Retrieved from https://www.nzgp-webdirectory.co.nz/site/nzgp-webdirectory2/files/pdfs/forms/soim_abbreviated_maslach_burnout_inventory.pdf
- McHugh, M. D., Kutney-Lee, A., Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). *Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care*. *Health Affairs*, 30(2), 202-10. Retrieved from <http://search.proquest.com/docview/854856308?accountid=27965>
- Nelson, J. W. (2013). *Job satisfaction of nurses in jamaica* (Order No. 3607923). Available from ProQuest Dissertations & Theses Global. (1496774509). Retrieved from <https://search.proquest.com/docview/1496774509?accountid=139409>
- Ngo-Henha, P.E., (2017). *A review of existing turnover intention theories. World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering*, 11 (11), pp. 1-4.
- Oldham, G., & Hackman, J. (1972). *Hackman and Oldham job characteristics model. Employee motivation theories. YourCoach Gent*. Retrieved from <https://www.yourcoach.be/en/employee-motivation-theories/hackman-oldham-job-characteristics-model.php>

- Paynton, T., (2008). The informal power of nurses for promoting patient care. OJIN: *The Online Journal of Issues in Nursing*, 14(1). Retrieved from <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol142009/No1Jan09/ArticlePreviousTopic/InformalPowerofNurses.aspx>
- Raziq, A., & Maulabakhsh, R. (2015). *Impact of working environment on job satisfaction*. Retrieved from [https://doi.org/10.1016/S2212-5671\(15\)00524-9](https://doi.org/10.1016/S2212-5671(15)00524-9)
- Schwab, R. L. (1981). *The Relationship Of Role Conflict, Role Ambiguity, Teacher Background Variables And Perceived Burnout Among Teachers* (Order No.8106751). Available from ProQuest Dissertations & Theses Global. (303125104). Retrieved from <https://search.proquest.com/docview/303125104?accountid=139409>
- Schwab, R. L. (1983). *Teacher burnout: Moving beyond "psychobabble."* *Theory Into Practice*, 22(1), 22–26. Retrieved from <http://www.jstor.org/stable/1476236>.
- Schwab, R.L., & Iwanicki, E. (1982). *Who are burned-out teachers?* *Educational Research Quarterly*, 7(2), 5–17.
- Simons, K., & Jankowski, T. (2008). *Factors influencing nursing home social workers' intentions to quit employment.* *Administration in Social Work*, 32(1), 5-21. Retrieved from doi:10.1300/J147v32n01_02
- Slade, R. B., Jr. (2013). *Understanding the role of stress and burnout in employees at nursing facilities for the elderly* (Order No. 3601478). Available from ProQuest Dissertations & Theses Global. (1466272616). Retrieved from <https://search.proquest.com/docview/1466272616?accountid=139409>

- Stutzer, K. (2013). *The moderating effects of job-person fit on the relationship between moral distress and burnout in critical care nurses* (Order No. 3574447). Available from ProQuest Dissertations & Theses Global. (1449129713). Retrieved from <https://search.proquest.com/docview/1449129713?accountid=139409>
- Takase, M., Maude, P., & Manias, E. (2005). Explaining nurses' work behavior from their perception of the environment and work values. *International Journal of Nursing Studies*, 42, 889-898. doi:10.1016/j.ijnurstu.2004.12.008
- Tourangeau, A.E., & Cranley, L.A.(2012). *Nurse intention to remain employed: understanding and strengthening determinants. Nursing and health Care Management andPolicy.*
- Weiss, D., Dawis, R., George, W., & Loyd, H. (1977). *Minnesota satisfaction questionnaire*. Retrieved from <http://vpr.psych.umn.edu/instruments/msq-minnesota-satisfaction-questionnaire>
- Zellmer, D.D. (2005). *Teaching to prevent burnout in the helping professions. AnalyticTeaching*, 24(1): 20-25.