

# Managing Stress Of Nurses Through Their Efficiencies And Commitment: An Empirical Investigation

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## ABSTRACT

It has been determined that nursing is a profession with high levels of stress. Not only did nurses' health suffer because of the stress of their jobs, but they also struggled to cope with the demands of their jobs. This study aimed to figuring out how to manage nursing shifts to avoid Work-related Stress and how to control and manage nursing works to avoid work-related stress in nursing, which can affect it. according to some independent variables such as the type of nurse, the scientific qualification, the type of hospital, the social situation, and the age group. The researchers selected a sample of (168) nurses who work in private clinics. Collected data was analyzed through SPSS version 22. Findings shows that all the considered constructs are having a strong relationship.

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## INTRODUCTION

Nursing has been identified as an occupation with high levels of stress. It was discovered by (Okuhara et al., 2021), that job stress brought about hazardous impacts not only on nurses' health but also in their abilities to cope with job demands. Occupational stress is a recognized problem in health care workers. Nursing has been identified as a stressful occupation by a number of studies (Nilsson et. al., 2022). Stress has a cost for individuals in terms of health, wellbeing, and job satisfaction, as well as for the organization in terms of absenteeism and turnover, which may impact the quality of patient care (Chen et al., 2022; Redley et al., 2022). Stress has been categorized as an antecedent or stimulus, as a consequence or response, and as an interaction (Baye et al., 2020; Anusiewicz et al., 2020). This seriously impairs the provision of quality care and the efficacy It has been examined using a variety of frameworks (Betke et al., 2021; Çınar et al., 2021). For instance, (Zhou et al., 2022) proposed a physiological assessment that lends credence to the idea that stress and illness are linked. Lazarus and Folkman, on the other hand, argued for a psychological perspective that defines stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her wellbeing" (Sagherian et al., 2022).

However, stress does not necessarily cause harm. In fact, occupational stress has been cited as a significant health problem (Malinowska-Lipień et al., 2021; Stanulewicz et al., 2019; Lim et al., 2022). However, (Jiang et al., 2012) was the first to assess work stress in nursing, identifying four sources of anxiety among nurses.

## KEYWORDS:

nurse,  
clinics,  
stress,  
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Menzies's findings were based on the findings of Menzies's cognitive appraisal, which is their perceptions and interpretations of events. According to (Sagherian et al., 2022) personality traits also influence the stress equation because what may be overtaxing to one person may be exhilarating to another. Care for patients, making decisions, taking responsibility, and making changes (Bae et al., 2022). Due to the physical labor, human suffering, work hours, staffing, and interpersonal relationships that are central to the work nurses do, the nurse's role has long been regarded as stressful. The issues of job stress, coping, and burnout among nurses are of universal concern to all managers and administrators in the area of health care. All of these stresses can be modified in a positive way by the use of appropriate stress management skills (Okuhara et al., 2021). These stresses have been escalating since the middle of the 1980s due to the increasing use of technology, ongoing rises in the costs of health care, (Ekingen et al., 2023) and turbulence within the work environment (Nishiguchi et al., 2022).

As a result, the goal of this study was to determine: (1) the level of professional stress experienced by staff nurses; and (2) the various factors that influence this level. This would allow for the development of long-term strategies to enhance staff nurses' personal and professional quality of life. This research paper discusses work-related Stress in Nursing and how controlling the risk to health.

## RESEARCH QUESTIONS AND OBJECTIVES OF THE STUDY

The aim of the study is to assess Factors that cause nurses Work-related stress in Saudi Arabia in the private hospital in Riyadh to answer this problem the following questions will be addressed:

1. To identify the relationship between nursing work load and nursing efficiency.
2. To identify the relationship between nursing work load and nursing commitment.
3. To identify the relationship between nursing role conflict and nursing efficiency.
4. To identify the relationship between nursing role conflict and nursing commitment.
5. To identify the relationship between nursing role ambiguity and nursing efficiency.
6. To identify the relationship between nursing role ambiguity and nursing commitment.

And thus based on the research objectives, the following research questions are developed.

1. Is there any relationship between nursing work load and nursing efficiency?
2. Is there any relationship between nursing work load and nursing commitment?
3. Is there any relationship between nursing role conflict and nursing efficiency?
4. Is there any relationship between nursing role conflict and nursing commitment?

5. Is there any relationship between nursing role ambiguity and nursing efficiency?
6. Is there any relationship between nursing role ambiguity and nursing commitment?

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### Nursing Workload And Nursing Efficiency

Nursing workload and efficiency are important factors that affect the quality of patient care. Several studies in past conducted in the same perspectives, for instance, the study of (Cho et al., 2015), meta-analysis examines the relationship between nurse staffing and patient outcomes. The study found that higher nurse staffing levels were associated with better patient outcomes, including lower mortality rates, fewer complications, and shorter hospital stays (Cho et al., 2015). Similarly, another study conducted by (Lake, 2012), this study develops and tests a tool for measuring nursing workload and nursing efficiency. The Practice Environment Scale of the Nursing Work Index (PES-NWI) assesses the organizational features of nursing work environments that affect the quality of patient care. In addition to that, the study of (Aiken et al., 2014), examines the relationship between nurse staffing levels and education and hospital mortality rates in nine European countries. The study found that higher levels of nurse staffing and education were associated with lower mortality rates. Another study by (Stone, 2008) that examines the relationship between staffing levels and patient outcomes in different specialty units, including critical care, medical-surgical, and telemetry units. The study found that higher staffing levels were associated with better patient outcomes, including lower mortality rates and fewer complications. Similarly, in the study of (Rafferty, 2007) examines the relationship between nurse staffing levels and patient outcomes in English hospitals. The study found that higher nurse staffing levels were associated with lower patient mortality rates and shorter hospital stays. Thus based on the following past evidences the present study developed the hypothesis.

H1: Nursing work load has a positive and significant impact on nursing efficiency.

### Nursing Workload And Nursing Commitment

Workload and employee commitment are common word in social sciences. However, a plenty of past studies identified the relationship between these two terms in medical sciences as well. For instance, the study of (Aiken et al., 2002) found that nurse staffing levels and workload are important determinants of nurse commitment, indicating that nurses who are more committed tend to work in environments with better staffing ratios. Similarly, in the study of (Lake, 2002), nursing workload was found to be a significant predictor of job dissatisfaction and turnover, suggesting that reducing workload may improve nurses' commitment and retention. Hughes and James (2018) found that organizational support, including

staffing levels and workload management, was positively associated with nurses' affective commitment to their organization. Similarly, in a study by (Laschinger et al., 2009), higher nursing workload was associated with lower levels of nurses' emotional exhaustion and increased commitment to their organization. There was another systematic review by (Schaufeli et al., 2009) showed that high levels of workload were associated with lower levels of nurses' commitment, job satisfaction, and well-being, highlighting the need for interventions to improve workload management and support nurses' commitment to their profession. Henceforth, the following study then postulate the hypothesis below.

H2: Nursing work load has a positive and significant impact on nursing commitment.

### **Nursing Role Conflict And Nursing Efficiency**

Nursing role conflict occurs when nurses face conflicting demands or expectations from different sources, such as patients, families, colleagues, and supervisors. This conflict can lead to job dissatisfaction, stress, and burnout. The concept of nursing efficiency refers to the ability of nurses to perform their duties effectively and efficiently. Research has suggested that nursing role conflict can have a negative impact on nursing efficiency.

One study conducted by (Zhang et al., 2018) aimed to explore the relationship between nursing role conflict and nursing efficiency among Chinese nurses. The study found that nursing role conflict was negatively correlated with nursing efficiency, indicating that nurses who experienced more role conflict had lower levels of efficiency in their work.

Another study by (Sankari et al., 2017) investigated the impact of nursing role conflict on the efficiency of nursing care delivery in a hospital setting in India. The study found that nursing role conflict was a significant predictor of lower nursing efficiency, along with other factors such as workload and lack of resources.

Overall, these findings suggest that nursing role conflict can have a significant impact on nursing efficiency, highlighting the importance of addressing and resolving conflicts to promote effective and efficient nursing care.

H3: Nursing role conflict has a positive and significant impact on nursing efficiency.

### **Nursing Role Conflict And Nursing Commitment**

Nursing role conflict can have a negative impact on nursing commitment. When nurses experience conflicts in their roles, such as conflicting demands or expectations from supervisors or colleagues, it can lead to decreased job satisfaction, burnout, and turnover intention (Kim et al., 2016). This can ultimately result in reduced nursing commitment to the organization and decreased quality of care for patients.

According to a study by (Lin et al., 2018), nursing role conflict was negatively associated with nursing commitment, and this relationship was partially mediated by job satisfaction. The study found that when nurses experience role conflict, it can lead to decreased job satisfaction, which in turn can decrease nursing commitment.

Similarly, a study by (Cho et al., 2017) found that role conflict was negatively associated with nursing commitment, while role clarity was positively associated with nursing commitment. The study emphasized the importance of clarifying roles and responsibilities to reduce role conflict and promote nursing commitment.

Overall, these studies highlight the importance of reducing role conflict and promoting role clarity to improve nursing commitment and promote better patient outcomes. The study concludes that, Nursing role conflict play role in nursing commitment.

H4: Nursing role conflict has a positive and significant impact on nursing commitment.

### **Nursing Role Ambiguity And Nursing Efficiency**

Nursing role ambiguity can have a negative impact on nursing efficiency (Cimiotti et al., 2012). When nurses are uncertain about their roles and responsibilities, it can lead to confusion and inefficiency in the workplace. This can result in delays in patient care, decreased quality of care, and increased stress and burnout among nurses. Role ambiguity can occur when nurses are unclear about their job duties, reporting relationships, or the expectations of their supervisors or colleagues (Pai & Lee, 2019). This can be especially common in healthcare organizations that are undergoing significant changes, such as reorganizations or mergers (Kang & Kim, 2019).

To improve nursing efficiency, healthcare organizations can take steps to clarify roles and responsibilities for nurses (Ronen et al., 2020). This may involve providing clear job descriptions, outlining reporting relationships, and ensuring that nurses understand the expectations of their supervisors and colleagues (Jones et al., 2015). Providing ongoing training and professional development opportunities can also help nurses feel more confident and competent in their roles (Kalisch et al., 2014).

In addition, healthcare organizations can work to create a supportive and collaborative work environment. This can help to reduce stress and burnout among nurses, which can lead to improved efficiency and quality of care (Hickey et al., 2016). By fostering a culture of teamwork and communication, healthcare organizations can help nurses feel more engaged and invested in their work, which can lead to better outcomes for patients and the organization as a whole.

H5: Nursing role ambiguity has a positive and significant impact on nursing efficiency.

### nursing role ambiguity and nursing commitment

Nursing role ambiguity is a phenomenon that occurs when nurses are unclear about their roles and responsibilities, leading to confusion and job dissatisfaction. The concept of nursing commitment, on the other hand, refers to the level of dedication and loyalty that nurses have towards their profession, patients, and organization. Research has suggested that nursing role ambiguity can have a negative impact on nursing commitment.

One study conducted by (Shin et al., 2019) aimed to explore the relationship between nursing role ambiguity and nursing commitment among Korean nurses. The study found that nursing role ambiguity was negatively correlated with nursing commitment, indicating that nurses who experienced more

role ambiguity were less committed to their profession.

Another study by (Flinkman et al., 2010) investigated the factors that influence nursing commitment among Finnish nurses. The study found that nursing role ambiguity was a significant predictor of lower nursing commitment, along with job stress and lack of support from colleagues and supervisors.

Overall, these findings suggest that nursing role ambiguity can have a significant impact on nursing commitment, highlighting the importance of clarifying nursing roles and responsibilities to promote job satisfaction and dedication to the profession.

H6: Nursing role ambiguity has a positive and significant impact on nursing commitment.

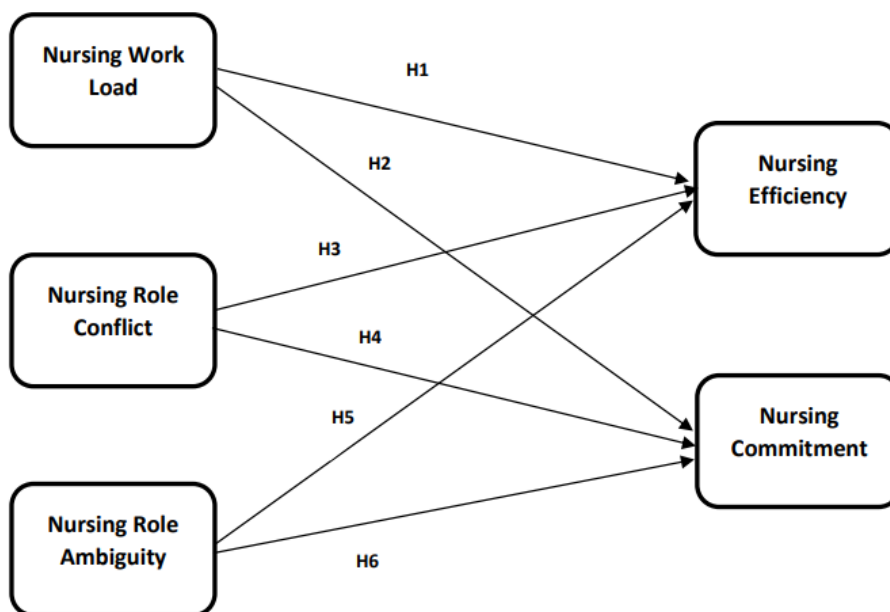


Fig. 1: Theoretical Framework

## METHODOLOGY

### Procedure And Data Collection Process

Data were collected from Riyadh Saudi Arabia, where the private clinics were targeted. Respondents included the nurses' males and females consequently. Researcher then targeted total of nineteen clinics where 168 nurses (male & female) working. These clinics were private entity and after the approval of their heads the researcher then started to distributed the survey questionnaire. Researcher further requested to all the male and female nurses to participate in the survey questionnaire.

female nurses working in these private clinics. Henceforth, surveys distributed among the nurses. One complete day was dedicated to target one clinic. Thus, it took nineteen (19) working days to obtain the data from the targeted respondents.

One hundred and sixty-eight (168) questionnaire were distributed in total. Where the usable questionnaires were counted as one hundred and forty-three (143). Remaining questionnaires were discarded due to insufficient and false entries. In order to justify the validity of the respondents, the researcher then used the previous recommendations of (Hair et al., 2010), which says at least 5 times higher the numbers of the total construct items. Thus present study considered 21 items and in conclusion  $21 \times 5 = 105$ . Hence, present study considered the one hundred and forty-three (143) valid responses. Questionnaire was based on 5 point Likert-scale i.e. 1= strongly disagree and 5= strongly agree.

## DATA ANALYSIS PROCESS

### Measurements

As previously mentioned the respondents were the male and

## Descriptive Analysis

All the descriptive analysis can be seen in the table below. Where male nurses were recorded as low comparatively with the female nurses. Similarly, 29 respondents were recorded as local Saudi nationals and 139 recorded as other nationalities.

65 respondents were from the young age 21-30, whereas, only 67 were found as married and 101 were singles and not married. Nursing diploma is however important for this type of job, however some of them were having higher education as well. Head nurses were recorded as 38 and regular nurses were counted as 130. All the descriptive can be seen in table below.

**Table 1: Respondents Demographics**

Demographics	Options..	Frequency = 168	Percent age
Gender	Male	63.00	37.50
	Female	105.0	62.50
Nationality/Race	Saudi Nationals	29.00	17.26
	Other Nationalities	139.0	82.73
Age	Up to 20 Years	0.00	00.00
	30-21	65.00	38.69
	40-31	54.00	32.14
	50-41	49.00	29.16
	50 & above	00.00	00.00
Marital Status	Married	67.00	39.88
	Non-Married	101.0	60.11
Education	Nursing Diploma	13.00	7.73
	Undergraduate	137.0	81.54
	Graduate	18.00	10.71
Position	Head/Nurse	38.00	22.61
	Nurse	130.0	77.38

## Validity Checking

Validity among the construct items can be checked through Cronbach alpha and Composite reliability(CR) tests and

procedure. However, present study relies on the past studies recommendations run the program of Cronbach alpha test using SPSS version 23. The minimum and acceptable range should be more or equal to 0.70 and is considered as acceptable (Vinzi et al., 2010).

**Table 2: Cronbach's Alpha Values Results**

Constructs	Cronbach Alpha Values
Nursing Work Load (NWL)	0.989
Nursing Role Conflict (NRC)	0.899
Nursing Role Ambiguity (NRA)	0.865
Nursing Efficiency (NE)	0.798
Nursing Commitment (NC)	0.788

## Standard Deviation And Mean Value

Table set below shows all the values of standard deviation, mean values and mean level. For instance, the mean value of (NWL) is calculated 4.779, whereas, standard deviation (SD) recorded as 0.788, and thus considered as middle to the mean level. Further, (NRC) mean calculated as 4.761 and SD value as 0.762 and considered as middle to the mean level. Similarly,

(NRA) values of mean were recorded 4.009, and value for standard deviation SD reflected as 0.754, also included in the middle to the mean level. Mean value of (NE) 4.891, whereas SD value were counted as 0.776 and also considered as middle to the mean level. Similarly, mean value of (NC) was recorded as 4.023 and SD were calculated as 0.767 and considered as middle to the mean level.

However, all the values can be seen in the table below.

**Table 3:** Analysis of Means and Standard Deviation

Constructs	Mean	Standard Deviation	Mean Level
Nursing Work Load (NWL)	4.779	0.788	Middle
Nursing Role Conflict (NRC)	4.761	0.762	Middle
Nursing Role Ambiguity (NRA)	4.009	0.754	Middle
Nursing Efficiency (NE)	4.891	0.776	Middle
Nursing Commitment (NC)	4.023	0.767	Middle

**Hypotheses, Correlation Test**

Pearson test is conventionally used in the social sciences to test the correlation of considered constructs. SPSS version 22 was

utilized to conduct the Pearson test for the considered constructs that includes; nursing work load, nursing role conflict, nursing role ambiguity, nursing efficiency and nursing commitment. To follow the rule of thumb suggestions is that all the values 0.01 are considered as significant at two tailed.

**Table 4:** Hypotheses Correlation Test

Correlation of Variables						
		Nursing Work Load	Nursing Role Conflict	Nursing Role Ambiguity	Nursing Efficiency	Nursing Commitment
Nursing Work Load	Pearson Correlation	.613**	.422**	.394**	.617**	.482**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	168	168	168	168	168
Nursing Role Conflict	Pearson Correlation	.378**	.409**	.332**	.376**	.398**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	168	168	168	186	168
Nursing Role Ambiguity	Pearson Correlation	.479**	.488**	.611**	.766**	.343**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	168	168	168	168	168
Nursing Efficiency	Pearson Correlation	.587**	.543**	.578**	.476**	.366**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	168	168	168	168	168
Nursing Commitment	Pearson Correlation	.565**	.565**	.514**	.945**	.565**
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	168	168	168	168	168

\*\*\*Correlations are significant at 0.01 level (2-tailed)

**Hypotheses Results**

Below table contains the values and hypotheses results. For instance, H1 connects (NWL) and (NE) are significant at (0.000) and calculated the t-value with 8.687, thus the link found positive. Similarly, H2 linking of (NWL) and (NC) that were also found significant at (0.000), and the t-value recorded as 9.881,

and considered as positive. Similarly, the link that connects (NRC) and (NE) is also found significant at (0.000), and t-value calculated as 6.899, also considered as positive. H4 linking (NRC) and (NC) found also significant at (0.000), where the t-value calculated as 7.815 and also found this relationship positive. Similarly, H5 and H6 both the t-values and found significant at 0.000. Values can be seen in table below.

**Table 5: Hypotheses Results**

	Constructs	t-value	Significant	Result
H1	Nursing Work Load → Nursing Efficiency	8.687	0.000	Positive
H2	Nursing Work Load → Nursing Commitment	9.881	0.000	Positive
H3	Nursing Role Conflict → Nursing Efficiency	6.899	0.000	Positive
H4	Nursing Role Conflict → Nursing Commitment	7.815	0.000	Positive
H5	Nursing Role Ambiguity → Nursing Efficiency	7.978	0.000	Positive
H6	Nursing Role Ambiguity → Nursing Commitment	8.902	0.000	Positive

## CONCLUSION

Present study conducted in the Kingdom of Saudi Arabia. Theoretical framework has been developed after a critical literature review and hypothesized the relationship among the considered constructs. Five (5) constructs and six (6) hypotheses were developed. One hundred and sixty-eight (168) valid responses were obtained from the targeted respondents. The results however showed all the suggested hypotheses are having significant relationship with each other. Hypotheses were tested through SPSS and found significant at all levels.

### Study Limitations And Future Directions

Contemporary study is however tried to cover important aspects but research is always with flaws. Future studies can consider these important limitations such as, firstly the future study should consider the public sector clinic or hospitals in order to obtain more data. Secondly, future studies should consider more constructs or can change the sequence of these constructs. Thirdly, future studies can target other countries, due to different demographics the findings may be different. Fourthly, with the same constructs the other professionals can be targeted such as physicians etc.

### Ethical Approval

Almost in all researches the ethical approval is common and should be considered. Likewise, contemporary research also considered two aspects of ethical approval consequently the valid and deserved references and research respondent's confidentiality and assurance. Both aspects are high and well considered.

### Funding

Contemporary study received no specific funds or grant from any funding agency in the public, commercial or not for any other profit sector.

## CONFLICT OF INTEREST

Author and co-author have seen and agree with the contents of the contemporary article. And thus certify that this

submission is contained with the original work and not under review at any other publication.

### Informed Consent

Informed consent statement was written in the questionnaire and has clearly mentioned that I am willingly and voluntarily participating in this study and I have no objection unless the data is confidential.

### Authorship Contribution

This study has two authors, the core author has developed the study gap, literature review and methodology, whereas the second author collected the data and analyzed the data and put efforts in writing the abstract study limitation and discussion part.

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