

Work Engagement and Motivation of Overseas Nurses Working in Saudi Arabia

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ABSTRACT

This study looked into the type of job engagement, level of motivation, and demographic profile of overseas nurses working in Saudi Arabia. It described quantitatively how their involvement and motivation help them advance their careers and improve the quality of their job. The descriptive survey approach was used in this investigation. Data were gathered by online surveys using Google Forms and content analysis for the quantitative component utilizing a researcher-devised questionnaire. The study involved 200 overseas nurses who work in outpatient and inpatient settings in the emergency department, intensive care unit, and operating room. The frequency-percentage distribution, weighted arithmetic mean, test of normality and test of homogeneity of variances, Kruskal-

Wallis test, and Mann-Whitney U test were utilized for statistical treatment. Results show that most of the respondents were 25–39 years old, female, married, Filipinos, Christians, had bachelor's degree in nursing, assigned to Emergency Room, had 6–10 years in service, Staff Nurse III, and received an average of 7000 SAR monthly salary. They have higher cognitive and physical work engagement intrinsically and extrinsically. Results also show a significant difference in their type of work engagement in terms of age, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary. Moreover, it was found that there is a significant difference in their level of motivation in terms of highest educational attainment, area of assignment, position title, and monthly salary. It is recommended that the output of the module on work engagement and motivation of overseas nurses be utilized by the hospital administration and future researchers. This is to ensure that the overseas nurses are highly engaged and inspired to have a high-performing nursing workforce.

Keywords: *engagement, module, motivation, overseas nurses*

INTRODUCTION

Nursing is the most culturally diverse healthcare profession. As with other professions, nursing has a long list of opportunities for its professionals. The growing demand in healthcare brought about tremendous change in the profession, progressing and advancing. Nursing is an exceptional profession which means being a nurse needs dedication, understanding, genuine love and care for people, and a good sense of organization to provide a high-quality standard of care (Bakker et al., 2018).

Every human being has specific needs, drives, aspirations, and capabilities at varying degrees of intensity, people's basic needs are the same. Maslow as applied to workers, it is only when these needs are

met that workers are engaged and motivated cognitively, emotionally, and physically ready to satisfy the needs of the company and other people.

On the other hand, demand for nurses has been on the rise for several years, spurred by various economic and demographic factors. The demand for nurses is increasing worldwide. In the Kingdom of Saudi Arabia (KSA), to meet the recommended ratio of one nurse for every 200 Saudi citizens, the government needs to recruit 185,722 expatriate nurses even a vast of challenges in the recruitment of expatriate nurses that includes a highly competitive market, high turnover, high healthcare instability, and financial costs just to ensure adequate nursing workforce and patient safety are addressed (Aljohani, 2020).

The Saudi Commission for Health Specialties, Saudi Nurses Association, and nursing leaders from all sectors in the Kingdom of Saudi Arabia ensures adequate staffing across the private and public sectors is required to guarantee the safety of healthcare professionals and patients. Health workers are very essential and hospitals cannot operate without a qualified and motivated nursing workforce. Thus hospital administration seeks some additional strategies on how their nurses engage and keep them motivated for a better organizational commitment, quality of work relationship, productivity, and performance. In addition, positive outcomes have been linked with engaged and motivated nurses in an organization, will provide a better quality of care, decreased intent to leave, increased patient satisfaction, and reduced hospital mortality rates thus increasing financial profitability for the hospital organizations (Keyko et al., 2016).

Work engagement defines as when individuals possess a positive and effective motivation toward their work that will create a high level of energy, are eager about their work, and are immersed in their work activities. Work engagement was seen as a positive behavior that brings the individual urge to perform well in their field or viewpoint at work that would prompt positive work-related results (Bakker & Albrecht, 2018). For this reason, high work engagement influences the organization which leads to a high quality of care, effective use of the resource, a decrease in the mortality rate, and high patient satisfaction while low work engagement implies increased turnover rates and a reduction of quality of care given to the patients. When employees are engaged, they felt enthusiastic and activated, thus it is much easier for them to finish their job with joy and fulfillment. Boosted physical, cognitive, and emotional capacity helped them to be proactive and show initiative, and persevere when facing demanding situations.

Moreover, motivation is the key to performance improvement. It is the driving force behind all the actions of the individual. Motivation is the basic drive for all of our behavior, which involves our needs, desires, and ambitions in life. It is based on reaching success and achieving all our aspirations in life. Achievement goals can affect the way a person performs a task and represent a desire to show competence. These basic physiological motivational drives affect our natural behavior in different environments. Most of our goals are incentive-based and can vary from basic hunger to the need for love and the establishment of mature roles. Our achievement motives can range from biological needs to satisfying creative desires or realizing success in competitive ventures. Motivation can also be inferred from the level of engagement. Motivation is important because it affects their everyday lives, all of their behaviors, actions, thoughts, and beliefs are influenced by their inner drive to succeed (Knowles et al., 2016). Engaged employees are being both intrinsically and extrinsically motivated by different factors that will lead to positive outcomes which will impact healthcare organizations.

In KSA, since overseas nurses have a significant part and impact in delivering the healthcare system, hospital administration sees to it that employees are involved in the goals to assure that employees stay and ensure the presence of a highly productive workforce. A highly engaged employee would deliver beyond expectations outcomes that the hospital would benefit from.

With the situation mentioned, the researcher has decided to study work engagement and motivation of overseas nurses; how it relates to their performance, to answer some questions that the researcher has in mind like what are the motivations of overseas nurses and how work engagement impacts the organization facilitating enhanced physical, emotional and cognitive capacity on the part of overseas nurses in that will create delivery of high quality of care, lowering the mortality rate, improving organizational profitability,

and lastly professional growth development of overseas nurses. The level of motivation varies in terms of how employees are engaged or disengaged in one organization. Based on the observation of the researcher being in a foreign country plays a great role in how nurses are engaged and motivated, depending on their cognitive, emotional, and physical mindset toward the environment or the organization they belong, and with the help and support of their supervisor that makes their work performance level up and staying contented in their work even if they have the different religious group, beliefs, cultures and ethnic groups. Similarly, as claimed by Saks and Gruman (2017), socialization and personal resources are vital in one organization which includes superior support to an employee in one organization, positive feedback and recognition may influence the work engagement of the employee.

The researcher interviewed co-workers about the program of the hospital on engagement and motivation. And most employees responded that hospitals have a poor program to measure and improve the engagement and motivation of an employee. In addition, psychological stability will greatly affect how employees are motivated and engaged in their work as self-beliefs, self-efficacy, optimism, hope, and resilience can predict work engagement and motivation, especially in the Arab country wherein they need to learn about different cultures and beliefs of their clients so that they can engage and increase job performance that will able to deliver interventions appropriately.

Hence, these gaps in the engagement and motivation of overseas nurses which was reported by several studies in Saudi Arabia, as well as in other countries worldwide, the researcher who is an emergency nurse for 12 years, in the hospital and researcher witnessed some disengaged overseas nurses in a selected tertiary hospital in KSA, was prompted to conduct a study to determine whether overseas nurses working in the hospital are engaged and motivated in doing their task and factors may affect the quality of care being provided, to bridge the said gaps by formulating a Module on Work Engagement and Motivation of Overseas Nurses that will be proposed to the nursing service administration as well as to the hospital administration and recommend its utilization to increase engagement and motivation of overseas nurses in improving patient satisfaction services and the quality of work.

The researcher understands that engagement and motivation have a great impact on the development and professional growth of overseas nurses. Employees are motivated when they are recognized and taken care of. They mostly engage when their cognitive, physical, and emotions are stable.

In addition, Kuijpers et al. (2020) discuss that employees can learn to craft their jobs resulting in higher levels of work engagement and motivation that will increase the meaning of work that will best fit in the organization. The engagement and level of motivation will depend on whether the staff perceives themselves as able to do things, whether they are willing to do things and whether they have the means to do them.

Statement of the Problem

This study aimed to determine overseas nurses' work engagement and motivation in an Arab country. The study answered the following questions in particular:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Age;
 - 1.2 Sex;
 - 1.3 Civil Status
 - 1.4 Nationality;
 - 1.5 Religion;
 - 1.6 Highest Education Attainment;
 - 1.7 Area of assignment;
 - 1.8 Length of service
 - 1.9 Position Title; and
 - 1.10 Monthly salary?

2. What is the level of work engagement of overseas nurses in terms of:
 - 2.1 Cognitive;
 - 2.2 Emotional; and
 - 2.3 Physical?
3. What is the level of motivation of overseas nurses in terms of:
 - 3.1 Intrinsic and
 - 3.2 Extrinsic?
4. Is there a significant difference in the level of work engagement when the respondents are grouped according to demographic profile?
5. Is there a significant difference in the level of motivation when the respondents are grouped according to demographic profile?
6. Based on the study results, what proposed module on work engagement and motivation can be developed to strengthen the engagement and motivation of overseas nurses towards improving their work?

Theoretical Framework

This research looked into the important facts about the variables, which are the assessment of work engagement and motivation of overseas nurses., as well as the proposed output, which is the module on work engagement and motivation of overseas nurses to strengthen the engagement and motivation of overseas nurses in a foreign country that will be beneficial to patients, staff and hospital administration.

In particular, the study utilized work engagement and motivation theories to improve overseas nurses' involvement in the hospital, strengthening their dedication and commitment to the workplace.

Once it is placed in the right demand, employee engagement in an organization is one essential component to increased and better work performance, motivation, and passion. William Kahn was one of the first scholars to develop the idea of the work engagement theory, which was later illustrated by McMann (2017) in his research. According to McMann, engaged people are willing to invest important personal resources, such as time and energy, in order to successfully complete their tasks. Engagement is at its peak when a person directs personal energies toward physical, psychological, and emotional labors. Engagement, thus, refers to taking part in hospital activities and being aware of the hospital's objectives. According to William Kahn's thesis, there are three different types of work engagement: cognitive, emotional, and physical engagement.

The demographic profile of the respondents in this study specifies the characteristics of nurses, including age, sex, civil status, nationality, religion, greatest educational attainment, area of assignment, length of employment, position title, and monthly compensation. Age and years of service were viewed as directly proportional factors in this study since they can affect participants' motivation and involvement. For employees to perform and contribute to what a company wants, they must be cognitively engaged, which means they must comprehend the firm's vision, goal, and tactics. Additionally, it has been suggested that if an employee attributes and understands the significance of their work, it will foster greater creativity and self-assured decision-making. While emotional involvement is purely focused on the emotional connection individuals have with their employer or organizational superiors. As a result, for the employees to support and believe in the organization's values and mission, a positive relationship is necessary. This includes group dynamics, positive interpersonal relationships, and lastly, the management styles that the organization applies to the employees in a way that makes them feel safe and trusted. Additionally, physical involvement refers to how individuals physically exert themselves to complete tasks or do their jobs.

Concerning the study, a diligent employee develops their whole self and can show a high level of engagement within the organization that motivates them to perform their best. For instance, engaged workers can tackle tasks while not being asked just because they require to and believe their additional effort can profit their organization. The emotional facet considerations could affect the behavior and

attitudes toward the hospital involvement of an employee and its leaders. Also, the physical facet of worker engagement considers the physical energies exerted by people to accomplish their roles. In different words, employees can prefer to have interactions themselves to variable degrees and in response to the resources they receive from their organization. Transfer oneself additional absolutely into one's work roles and devote more significant amounts of psychological features and emotional. Physical resources may be a profound method for people to retort to a company (Hargie, 2021).

Another theory relevant to this study, the Self Determination Theory of Deci & Ryan, illustrated by Dale (2020) in his study on Extrinsic motivators as an effective tool for motivating employees working in multinational organizations, proposed that outside motivation help enhance employee engagement through benefits. Two types of motivation: intrinsic and extrinsic. Intrinsic motivation is an inner force that leads employees to satisfy personal and structural aims. It guides people to try and do the activity that they notice exciting. Perse intended individuals have an enclosed drive that forms behaviors and inspiration to perform responsibilities with no external effects.

In contrast, extrinsic motivation is an exterior force that leads employees to satisfy personal and structural aims. Extrinsic rewards accommodate awards, bonuses, pay, and edges. It can also be within an honest relationship between employees, higher facilities, innovative operating conditions, and better administrator quality at the workspace.

Intrinsic motivation theory was based on primary needs and drives. Satisfying internal motives that give fulfillment and satisfaction thus involves seeking out and engaging self in different activities that are challenging and rewarding for itself. Goals are focused on outcomes that will meet the basic psychological needs. These correspond to the internal factors that determine the level of motivation of overseas nurses in work performance outcomes and strategies on how to increase motivation within itself.

On the other hand, extrinsic motivation is driven by external rewards that can be tangible such as money, or intangible such as praise or fame. Anchoring the level of motivation to extrinsic motivation is the monthly salary, bonus, increment and achievements, and appropriate recognition given to the overseas nurses.

The study of motivation cares about the influences that govern the initiation, direction, intensity, and persistence of behavior. Several researchers recognize three classes of motives: primary or biological (hunger and also the regulation of food intake); stimulus-seeking (internal desires for psychological features, physical and emotional stimulation, or intrinsic and extrinsic rewards); and learned (motives not heritable through reward and penalty, or by observation of others). The classic theory of Abraham Maslow, the hierarchy of desires theory, as compared to Herzberg's Two Factor Theory, whereby the primary three bottom steps-physiological, security, and social needs in the hierarchy are likened to the upkeep factors which might lower performance. In contrast, the two higher steps within the hierarchy, esteem and self-actualization desire, are psychological feature factors that may raise performance.

Moreover, Trait and Factor Theory by Parsons (1909), on the idea of development theory, is defined as the different training process, with different coaching and practice through follow-up and support activities of employees when they are engaged and motivated in their specific task. A simple way to think about career decision-making is what employees know (about themselves, options, life situations, for example). Nurses' needs are influenced to be either intrinsic to the employee or extrinsic from the context in which the employees live. The motivation factors within the theory are often delineated because the factors and the stimulants encourage and boost the staff to be additional productive and maintain their innovative behavior within the organization, thus creating increasing job satisfaction.

Understanding development theory can be essential in determining core values, strengths, weaknesses, and desired path. While all of these theories acknowledge the importance of cultivating a positive emotional relationship with work and developing meaningful professional ambitions, employees desire to be more innovative and advanced in their career development, thus needing involvement in the organization to which they belong.

Theoretical Paradigm

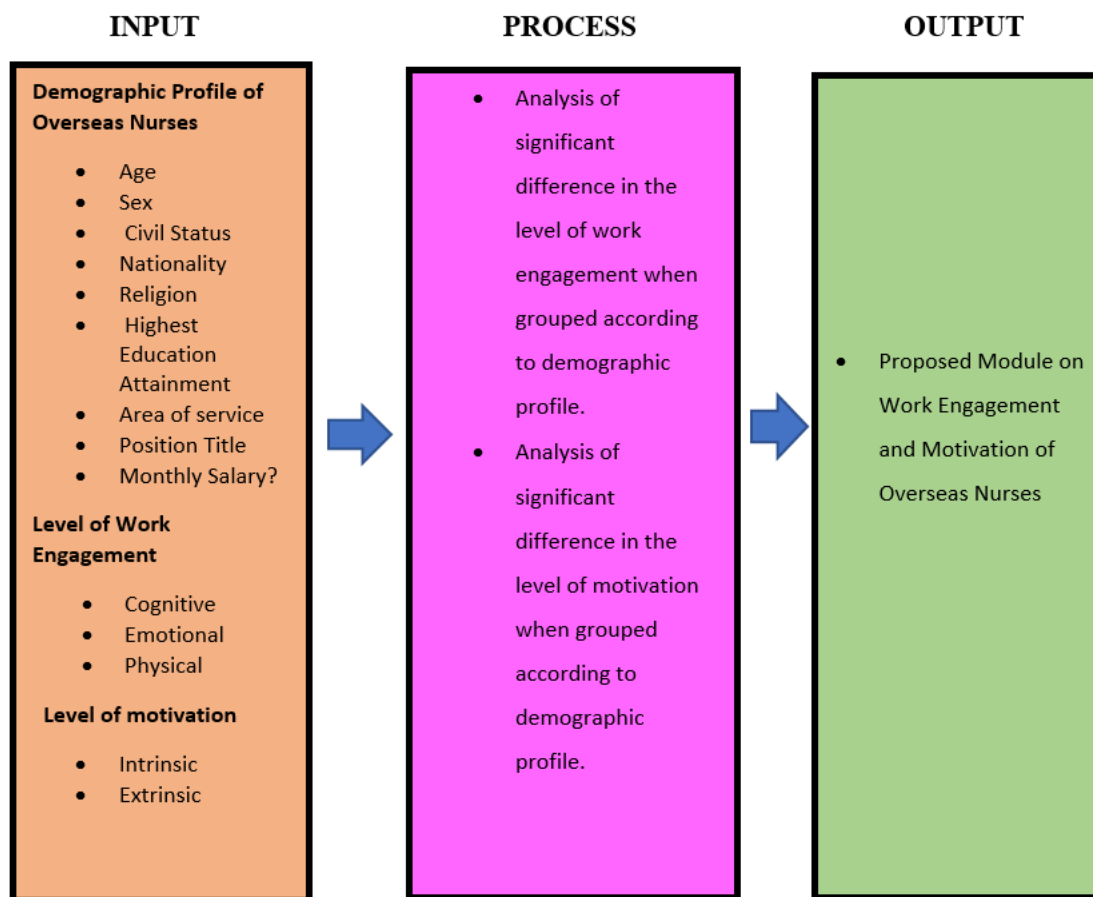


Figure 1. *Theoretical paradigm showing the flow of work engagement and motivation of overseas nurses leading to strengthening and improving their work (module development).*

METHODS

Research Design

The study was conducted using a quantitative methodology, specifically a descriptive survey, as well as descriptive-comparative research methods. A descriptive survey was used to determine the demographic profile of the overseas nurses in terms of age, sex, civil status, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary which was then used to assess their work engagement and motivation. A descriptive-comparative research design was also used to describe the significant difference in work engagement and motivation of overseas nurses in an Arab country when the respondents were grouped according to their demographic profile.

Research Locale

The overseas staff nurses working at University Hospital in Riyadh, Saudi Arabia, one of the kingdom's main government universities, with a total bed capacity of 1,400 and still expanding, took part in the poll. The Ministry of Education manages a huge government hospital. It was established in 1982 and serves as the primary hospital for King Saud University's Colleges of Medicine, Nursing, and Allied Health Sciences. A sophisticated tertiary hospital, where staff nurses employed were multinational, mostly Filipinos, Indians, and other nationalities. For the past 12 years, the researcher has worked as a full-time pediatric emergency nurse at the facility. The researcher focused her study on the Outpatient area, Inpatient areas such as pediatric, medical and surgical, oncology ward, Emergency room, Intensive Care Unit, and Operating Room areas of assignment of the overseas nurses.

Consequently, the underlying purpose of this study is to establish an assessment and evaluation of the engagement and motivation of overseas nurses. In addition, it consisted of junior and senior overseas nurses that have worked for more than 20 years and above and still with high levels of motivation and engagement in hospital activities. Therefore, the researcher chose this tertiary-level hospital to determine the level of work engagement that overseas nurses were involved in terms of cognitive, emotional, and physical engagement and their level of motivation in terms of intrinsic and extrinsic factors.

Research Population and Samples

Purposive sampling was used to choose the respondents, who were available for participation in the study at a specific time. The respondents had to meet the following criteria: a) overseas nurses regardless of country of origin; b) working in a University Hospital in an Arab Country c) staff nurses with at least one year of experience in varied positions (SN1, SN2, and SN3); d) overseas nurses willing to participate on the study; to which a total of 200 participants from the total of 415 population participated in the study. It excluded Saudi nurses and student nurses, interns, and postgraduate program students for they did not fit the criteria.

The Cochran formula was used to determine the sample size and the number of respondents in the study.

For large population:

$$n_0 = \frac{Z^2 pq}{e^2}$$

where: n_0 - sample size for large population

Z - abscissa of normal curve equivalent to 1.96 at 95% confidence

p - estimated proportion of the population (equivalent to 0.5)

q - is $(1 - p)$

e - margin of error (0.05)

note: n_0 value is standard at 384

For smaller population:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

where: n_0 - sample size for large population

n - sample size for smaller population

N - population

Computation:

$$\begin{aligned}
 N &= 415 \\
 n_0 &= \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 (0.5) (1-0.5)}{(0.05)^2} = 384 \\
 n &= \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} = \frac{384}{1 + \frac{(384 - 1)}{415}} = 384 \\
 n &= \frac{384}{1.92} = \frac{384}{1+0.92} = 200 \text{ respondents}
 \end{aligned}$$

Research Instrument

Purposive sampling was used to choose the respondents, who were available for participation in the study at a specific time. The respondents had to meet the following criteria: (a) overseas nurses regardless of country of origin; (b) working in a University Hospital in an Arab Country (c) staff nurses with at least one year of experience in varied positions (SN1, SN2, and SN3), and; (d) overseas nurses willing to participate on the study; to which a total of 200 participants from the total of 415 population participated in the study. It excluded Saudi nurses and student nurses, interns, and postgraduate program students for they did not fit the criteria.

Data Gathering Procedure

Before the actual data gathering, the researcher secured approval from the Graduate School to conduct the study. Likewise, permission was sought from the Institutional Board and was approved on February 03, 2022 (IRB Approval of Research Project No. E-22-6634). Upon approval, the same letter was handed personally to the Hospital Administration –Director of Nursing and Ethics Committee to conduct the study, all of whom were granted permission to conduct the study. Coordination with potential respondents from the identified research locale was coursed through the unit service managers' assistance and the hospital's head nurses.

Following the clearance of the various committees, an online survey was created using Google forms and sent to the target respondents by email and WhatsApp. The google form was set up to ensure that no questions went unanswered. Respondents were given a timetable of two weeks to answer the questionnaire from February 28 to March 12, 2022. To preserve the respondents' personal information, information confidentiality was enforced.

Statistical Treatment of Data

The researchers used the Tally tool for tallying data and SPSS (Statistical Package for Social Science) licensed to Sacred Heart College in computing the research data.

The researchers used different kinds of statistical tools, namely:

- A. *Frequency-Percentage Distribution* method was used on the first part of the questionnaire, the Demographic Profile of the respondents. The numbers obtained were converted by the researchers to a percentage by using this formula:

$$P = \frac{\text{no. of responses}}{\text{total no. of respondents}} \times 100$$

B. *Weighted Arithmetic Mean* was used to determine the number of respondents with the summation of products of frequencies and weights by using this formula:

$$WAM = \frac{\sum fw}{n}$$

where:

WAM – weighted arithmetic mean

$\sum fw$ – summation of the products of frequencies and weights

n – total number of responses per item

Level of Work Engagement of Overseas Nurses Working in Saudi Arabia

Continuum	Qualitative Index
3.26 – 4.00	Strongly Agree
2.51 – 3.25	Agree
1.76 – 2.50	Disagree
1.00 – 1.75	Strongly Disagree

Source: SHC Statistical Guide Revised Edition, 2021

A 4-point Likert scale with a qualitative index of Strongly Disagree to Strongly Agree was used to calculate and analyze the data on the level of work engagement, and the researcher created a questionnaire containing the level of engagement (cognitive, emotional, physical).

Level of Motivation of Overseas Nurses Working in Saudi Arabia

Continuum	Qualitative Index
3.26 – 4.00	Highly Motivated
2.51 – 3.25	Motivated
1.76 – 2.50	Less Motivated
1.00 – 1.75	Least Motivated

Source: SHC Statistical Guide Revised Edition, 2021

The researcher created a questionnaire with questions on the level of motivation based on the data responses from which the level of motivation was measured and examined using a 4-point Likert Scale with a qualitative index of Least Motivated to Highly Motivated (intrinsic and extrinsic).

C. *Test of Normality and Test of Homogeneity of Variances* to assess whether the test was parametric or non-parametric should be used based on the level of motivation of overseas nurses in an Arab country when the respondents are grouped according to age, sex, civil status, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary.

For the Test of Normality, Shapiro- Wik was used to test the null hypothesis by using this statistical tool:

$$W = \frac{\left(\sum_{i=1}^n a_i x_{(i)}\right)^2}{\sum_{i=1}^n (x_i - \bar{x})^2},$$

For the test of Homogeneity of Variances result, Levene's test was used by using this statistical tool:

$$W = \frac{(N - k)}{(k - 1)} \cdot \frac{\sum_{i=1}^k N_i (Z_{i.} - Z_{..})^2}{\sum_{i=1}^k \sum_{j=1}^{N_i} (Z_{ij} - Z_{i.})^2}$$

where

- k is the number of different groups to which the sampled cases belong,
- N_i is the number of cases in the i th group,
- N is the total number of cases in all groups,
- Y_{ij} is the value of the measured variable for the j th case from the i th group,
- $Z_{ij} = |Y_{ij} - \bar{Y}_{i.}|$, $\bar{Y}_{i.}$ is a mean of the i -th group,
- $Z_{i.} = \frac{1}{N_i} \sum_{j=1}^{N_i} Z_{ij}$ is the mean of the Z_{ij} for group i ,
- $Z_{..} = \frac{1}{N} \sum_{i=1}^k \sum_{j=1}^{N_i} Z_{ij}$ is the mean of all Z_{ij} .

The decision guidance will be $p > 0.05$, which means reject the null hypothesis, and $p > 0.05$, which means the null hypothesis was not rejected. Use parametric tests such as the t-Test and ANOVA if the decision fails to reject H_0 . Use non-parametric tests like the Mann- Whitney U test and the Kruskal- Wallis test if you want to reject H_0 . Before performing a parametric or non-parametric test, both the Test of Normality and the Test of Homogeneity of Variances should be satisfied.

D. *Independent t-Test* was used to answer the significant difference in work engagement when the respondents were grouped according to demographic profile sex.

$$t = \frac{(X_1 - X_2)}{\sqrt{\frac{(S_1)^2}{n_1} + \frac{(S_2)^2}{n_2}}}$$

Source: SSB Licensed to SHC

Where:

- $\bar{x}_1$ = mean of first values
- $\bar{x}_2$ = mean of first values
- s_1 = standard deviation of the first set of values
- s_2 = standard deviation of the first set of values
- n_1 = total number of values in the first set
- n_2 = total number of values in the first set

E. *One-Way ANOVA* was used to answer the significant difference in motivation when the respondents were grouped according to demographic profile age, sex, civil status, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary.

$$\begin{aligned}
 SS_b &= \sum \frac{(x_j)^2}{n_j} - \frac{(\sum \sum x_j)^2}{N} \\
 SS_w &= \sum \sum x_j^2 - \sum \frac{(x_j)^2}{n_j} \\
 SS_t &= SS_b + SS_w \\
 df_b &= k - 1 \quad df_w = N - k \quad df_t = N - 1 \\
 MS_b &= \frac{SS_b}{df_b} \\
 MS_w &= \frac{SS_w}{df_w}
 \end{aligned}$$

Source: SSB Licensed to SHC

Where:

- k = number of treatment
- n = number of samples
- i = row data
- j = column data

F. *Kruskal- Wallis Test* was the statistical test used to answer the significant difference in work engagement and motivation when grouped according to demographic profile, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary.

$$H = \frac{12}{n(n+1)} \sum \frac{R_i^2}{n_i} - 3(n+1)$$

where:

- k = the number of samples
- n_i = the size of the i th sample
- N = the sum of the sample sizes
- R_i = the sum of the ranks of the i th sample

Post Hoc Tests

- LSD/Scheffe's for ANOVA
 - Dunn or Dunn-Bonferroni (for Kruskal-Wallis)
- $$EC = a_B = a_{FWE} K$$

where:

EC = the new alpha that is used to evaluate each of the comparison or significance test

a_{FWE} = familywise error rate that is desired

K = number of comparisons

E. *Mann-Whitney U Test* was the statistical test used to answer SOP number 5 regarding the significant difference in work engagement and motivation of the respondents when they are grouped according to demographic profile age, sex, and civil status.

$$U_1 = n_1 n_2 + \frac{n_1(n_1 + 1)}{2} - R_1$$

$$U_2 = n_1 n_2 + \frac{n_2(n_2 + 1)}{2} - R_2$$

Ethical Considerations

The respondents' involvement was voluntary. All collected information is kept anonymous, confidential, and private until the study is completed. Throughout the investigation, the researcher followed all ethical guidelines to the letter. The Institutional Review Board of Health Sciences College Research on Human Subjects was approached for ethics approval (IRB Approval of Research Project No. E-22-6634). The nursing administration granted permission to gather data in the clinical area, along with a signed endorsement letter intended to encourage clinical nurses to participate. The questionnaire came with a cover letter that explained the study's origin and aim, as well as the potential volunteers, who have access to the data and the expected outcome.

RESULTS AND DISCUSSION

The study determined the level of work engagement and motivation of overseas nurses working in Saudi Arabia. The findings of the study were summarized as follows:

Demographic Profile of the Respondents

On work engagement and motivation of overseas nurses working in Saudi Arabia in terms of age, sex, civil status, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary, the majority of the respondents were 25–39 years old (155;77%), female (169;85%), married (199;60%), Filipinos (127;63%), Christians (168;84%), with Bachelor of Science in Nursing degree (160;80%), were assigned in the Emergency room (102;51%), with 6-10 years in service (77;38%), designated as Staff Nurse III (70;35%), and received 7000 SAR and above monthly salary (106;53%).

Level of Work Engagement of Overseas Nurses Working in Saudi Arabia

In terms of Cognitive Engagement, the generated sub-total WAM was 3.36, with a qualitative index of Strongly Agree. The indicator with the highest WAM of 3.48 was "I am aware of my job description and responsibilities" with a qualitative index of Strongly Agree. The indicator with the lowest WAM of 3.27 was "I am aware of the mission and vision of my hospital" with a qualitative index of Strongly Agree.

In terms of Emotional Engagement, the generated sub-total WAM was 2.97, with a qualitative index of Agree. The indicator with the highest WAM of 3.33 was "I feel overwhelmed by my patient care responsibilities and workload" with a qualitative index of Strongly Agree. The indicator with the lowest WAM of 2.79 was "I feel recognized and valued in this hospital" with a qualitative index of Agree.

In terms of Physical Engagement, the generated sub-total WAM was 3.26, with a qualitative index of Strongly Agree. The indicator with the highest WAM (3.46) was "I feel competent to do my job descriptions" with a qualitative index of Strongly Agree.

The indicator with the lowest WAM of 3.03 was "I have access to the things I need to do my job well" with a qualitative index of Strongly Agree.

In terms of Overall Work Engagement, the generated Overall WAM was 3.20, with a qualitative index of Strongly Agree. The category with the highest WAM of 3.36 was Cognitive Engagement with a qualitative index of Strongly Agree. The category with the lowest WAM of 2.97 was Emotional Engagement with a qualitative index of Agree.

Level of Motivation of Overseas Nurses Working in Saudi Arabia

In terms of intrinsic motivation, the generated sub-total WAM was 3.04, with a qualitative index of Motivated. The indicator with the highest WAM of 3.32 was "I work hard and enjoyed new experiences" with a qualitative index of Highly Motivated. The indicator with the lowest WAM of 2.77 was "The leaders in my hospital are a great model for employees and inspire me" with a qualitative index of Motivated.

In terms of Extrinsic Motivation, the obtained sub-total WAM was 2.75, with a qualitative index of Motivated.

The indicator with the highest WAM of 3.04 was "My hospital is willing to support my educational/training that I need" with a qualitative index of Motivated.

The indicator with the lowest WAM of 2.42 was "I am satisfied with my salary, bonuses, and increment" with a qualitative index of Less Motivated.

The level of motivation garnered an overall WAM of 2.90, with a qualitative index of Motivated. The category with the highest WAM was Intrinsic Motivation with 3.04, with a qualitative index of Motivated. The category with the lowest WAM of 2.75 was Extrinsic Motivation with a qualitative index of Motivated.

Significant Difference in the Level of Work Engagement According to their Demographic Profile

In terms of age, there is a significant difference in emotional aspect and overall engagement. The age bracket of 25–39 years old has lower emotional ($p=0.04$) and overall engagement ($p=0.04$) than those whose age belongs to 40–60 years old. Corollary to this, it was found that there is no significant difference between cognitive ($p=0.77$) and physical engagement ($p=0.36$).

No significant difference was noted in sex on level of work engagement in cognitive ($p=0.21$), emotional ($p=0.26$), physical ($p=0.08$), and overall engagement ($p=0.05$).

In terms of civil status, there is no significant difference in cognitive ($p=0.60$), emotional ($p=0.64$), physical ($p=0.57$) and overall engagement ($p=0.74$).

There is a significant difference was noted in nationality on level of work engagement in cognitive engagement ($p=0.00$) where the nurses from other countries have a lower mean. Based on the Dunn-Bonferroni Test, the group Others (Pakistan, African), with a low mean, contributed to the

significant difference according to nationality in terms of cognitive engagement. However, no significant difference was found in emotional ($p=0.18$), physical ($p=0.32$), and overall engagement ($p=0.16$).

There is a significant difference was noted in religion on the level of work engagement in cognitive engagement ($p=0.04$). Based on the Dunn-Bonferroni Test, the group Muslim with a low mean contributed to the significant difference in terms of cognitive engagement according to religion. At the same time, there is no significant difference in emotional ($p=0.31$), physical ($p=0.47$), and overall engagement ($p=0.91$).

In terms of the highest educational attainment, there is a significant difference in emotional engagement ($p=0.04$). Where the nurses with a diploma in nursing have the highest mean. While there is no significant difference in cognitive ($p=0.74$), physical ($p=0.36$), and overall engagement ($p=0.07$).

There is a significant difference in area of assignment on the level of work engagement in emotional ($p=0.00$), physical ($p=0.02$), and overall engagement ($p=0.00$). In emotional engagement, the group outpatient area, inpatient area, and operation room have a lower mean than others. In physical engagement, the group Inpatient Area has a lower mean than others. In overall work engagement, the group Outpatient and Inpatient areas have a lower mean than the others. There is no significant difference in cognitive engagement ($p=0.20$).

In terms of length of service, there is a significant difference in cognitive engagement ($p=0.00$). based on the Dunn-Bonferroni Test, the group 1–2 years and more than 10 years which has low means contributed to the significant difference according to the length of service in terms of cognitive engagement. while there is no significant difference in emotional ($p=0.74$), physical ($p=0.37$), and overall engagement ($p=0.12$).

There is a significant difference was noted in position title on the level of work engagement in cognitive ($p=0.02$) and overall engagement ($p=0.01$). Based on the Dunn-Bonferroni Test, the Staff Nurse III, which has a low mean, contributed to the significant difference in terms of overall work engagement according to position title. In cognitive engagement, the group Staff Nurse II has a higher mean than others. In overall engagement, the group Staff Nurse III has a lower mean than others. At the same time, there is no significant difference in emotional ($p=0.41$) and physical engagement ($p=0.06$).

In terms of monthly salary, there is a significant difference in emotional ($p=0.00$) and overall engagement ($p=0.00$), where the group 4000 – 4999 SAR and 5000–5999 SAR has a lower mean than the others. In emotional engagement, the group 4000–4999 SAR and 5000–5999 SAR, which has a lower mean. In Overall Engagement, the group 4000– 4999 SAR and 5000–5999 SAR has a lower mean than others. At the same time, there is no significant difference in cognitive ($p=0.36$) and physical engagement ($p=0.11$).

Significant Difference in the Level of Motivation of Overseas Nurses According to their Demographic Profile

There is no significant difference in the level of motivation in intrinsic ($p=0.14$), extrinsic ($p=0.11$), and overall motivation ($p=0.08$) when respondents were grouped according to their age.

In terms of sex, there is no significant difference in intrinsic ($p=0.55$), extrinsic ($p=0.45$), and overall motivation ($p=0.41$).

There is no significant difference in the level of motivation in intrinsic ($p=0.44$), extrinsic ($p=0.53$), and overall motivation ($p=0.31$) when respondents were grouped according to their civil status.

There is a no significant difference was noted in nationality on level of motivation in intrinsic ($p=0.58$), extrinsic ($p=0.48$), and overall motivation ($p=0.45$).

In terms of religion, there is no significant difference in intrinsic ($p=0.87$), extrinsic ($p=0.15$), and overall motivation ($p=0.34$).

There is a significant difference in the level of motivation in extrinsic ($p=0.04$) and overall motivation ($p=0.04$), where the group diploma in nursing has a highest mean than others. There is no

significant difference in intrinsic motivation($p=0.13$) when respondents were grouped according to their highest educational attainment.

In terms of area of assignment, there is a significant difference in intrinsic ($p=0.00$), extrinsic ($p=0.00$), and overall motivation ($p=0.00$). In intrinsic motivation, the group outpatient and inpatient area have a lower mean than others. In extrinsic and overall motivation, outpatient area, inpatient area, and operation room have lower mean than others.

There is no significant difference in the level of motivation in intrinsic ($p=0.08$), extrinsic ($p=0.97$), and overall motivation ($p=0.53$) when respondents were grouped according to their length of service.

In terms of position title, there is a significant difference in intrinsic ($p=0.00$) and overall motivation ($p=0.01$). Based on the Dunn-Bonferroni Post Hoc Test, the Staff Nurse III, which has a low mean, contributed to the significant difference according to position title in terms of intrinsic and overall motivation. However, no significant difference was found in extrinsic motivation ($p=0.17$).

There is a significant difference in the level of motivation in intrinsic($p=0.00$), extrinsic ($p=0.00$), and overall motivation ($p=0.00$) when respondents were grouped according to their monthly salary. Based on Dunn-Bonferroni Test, the groups 4000– 4999 SAR and 5000 –5999 SAR have a lower mean than others which contributed to the significant difference according to monthly salary in terms of Intrinsic, Extrinsic, and Overall Motivation.

The Output of the Study- Module of Work Engagement and Motivation for Overseas Nurses.

This output of the study is intended for overseas nurses. It is meant to assist them with their well-being while at the same time supporting them in their more extensive engagement and motivation in the hospital. This is to ensure that the workplace is happy, healthy, and functional. The module is intended to make every novice nurse understand better the purpose and the vision-mission of the hospital. The module is likewise hoped to make nurses realize their significant roles that will contribute to the goals and achievements of the hospital administration towards delivering high-quality care to patients.

CONCLUSIONS

The following conclusions are presented based on the findings of the study:

1. The majority of the overseas nurses in a tertiary hospital working in Saudi Arabia were young adults, female, Married, Filipinos, Christians with Bachelor's Degree in Nursing, assigned in the Emergency Room, have 6–10 years in service, Staff Nurse III, and receives 7000 SAR above monthly salary.
2. Overseas Nurses working in Saudi Arabia have higher cognitive and physical work engagement.
3. Overseas Nurses working in Saudi Arabia are intrinsically, extrinsically, and overall motivated.
4. The demographic profile in terms of age, nationality, religion, highest educational attainment, area of assignment, length of service, position title, and monthly salary can be accounted for the significant difference in the type of work engagement of overseas nurses.
5. The demographic profile of nurses in terms of highest educational attainment, area of assignment, position title, and monthly salary can be accounted for the significant difference in the level of motivation of overseas nurses.
6. The output of the study, which is based on the findings, the Module of Work Engagement and Motivation of Overseas Nurses, was crafted and proposed to be attended by overseas nurses who will benefit from the module.

Recommendations

In the light of the findings and conclusions of the study, the researcher recommends the following:

1. **For Overseas Nurses.** Improve the emotional and overall work engagement, specifically on the indicators that have been rated lowest in the study, and reinforce their involvement in hospital activities and projects that will enhance their engagement and motivation.
2. **For Nursing Managers.** Plan strategies on how overseas nurses engage and motivate themselves towards improving work. Consider the result of this study in improving the work engagement and motivation of overseas nurses working in Saudi Arabia to engage, motivate, and be involved in hospital and unit projects, thus improving the quality of work and services to the patients.
3. **For Nursing Service Managers.** Consider the need to strengthen the involvement of overseas nurses in the hospital. Consider the output of this study, a module on work engagement and motivation for overseas nurses that the nursing education department can use as a guideline in enhancing the participation and drive of overseas nurses. This is to ensure that the overseas nurses are highly engaged and inspired to have a high-performing nursing workforce.
4. **For Future Researchers.** Conduct a parallel study on the relationship between work engagement and motivation, which focuses more on other aspects of this study yet with wider and varied demographics of the respondents.

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