

The Factors of Job Satisfaction Among the Nurses in Emergency Department: The Saudi Arabian Context

Abdulelah Saeed Masoud Alqahtani¹

Abstract

Background and Study Aim: Saudi Arabia has been experiencing a chronic shortage of healthcare professionals, particularly the nursing profession that has demonstrated a high degree of employee turnover. Therefore, the aim of this study is to explore, analyse, and identify the factors that affect the level of job satisfaction among nurses who work in the ED (Emergency Department) in the public hospitals in Saudi Arabia. Therefore, this study has selected Asir Central Hospital (ACH) as the research context.

Research Method: This study has employed quantitative research method and collected data through online survey from 267 registered nurses who work in the ED.

Findings: The current study has found that the overall score of the job satisfaction among the nurses of the ACH is 3.33, which is higher than 3 in the 5-point Likert scale. Therefore, this study argues that the existing level of job satisfaction among the nurses who work in the ED in the ACH has a moderate level of job satisfaction. This study has found that the availability of resources in terms of working conditions has the highest score, and thus this construct has the highest level of influence on job satisfaction. The second ranked job satisfaction determinant is the work itself, which is followed by social relationships and communications, relationships with management, autonomy in terms of working conditions, scheduling in terms of working conditions, and the extrinsic rewards. This study has also found that gender and education levels do not have any effect

¹ Master degree of science in Healthcare Management, Executive Director of ABHA Private International Hospital, KSA.

on the determinants of job satisfaction, while age has effect on the determinants of job satisfaction.

Originality/Value: The outcomes of this study can work as a guide for the managers in the health sector in Saudi Arabia. As there is a chronic shortage of nurses in the KSA, this guidance can help the managers retain their skilled nurses.

Conclusion: The job satisfaction of the nurses cannot be detected from managers' perspective, and therefore it is necessary to assess and monitor the job satisfaction internally on a regular basis. As the extrinsic rewards have less influence on nurses' overall job satisfaction, the management needs to focus more on working conditions and the availability of resources to perform the tasks.

Background and Research Issues

According to the World Health Organisation (WHO, 2020), nurses are at the heart of the promotion of health, the prevention of diseases, and the delivery of primary and community care. The Royal College of Nursing (2020) opines that nurses assume critical role to help people to function at homes, workplaces, and leisure, which is the main aspect in the attainment of universal health coverage. Therefore, to achieve health for all depends on the availability of sufficient numbers of educated, well-trained, well-supported, and regulated nurses, who should receive pay and recognition that match with their quality of care and the level of services they provide. Nurses also comprise approximately half of the global workforce, and they represent a considerable share of the female workforce (WHO, 2020). However, there is a scarcity of health workers, particularly nurses and midwives, at the global level (ICNM, 2018; Liu et al., 2016; Moulds, 2020; WHO, 2020). In their projection model, Liu et al. (2016) predicted that the demand for health workers at the global level by 2030 would be at 80m, which is two times more than the available stock of health workers at the 2013 level. The model also predicted that the supply of health workers at the global level would be approximately 65m during the same period, and

therefore there would be a shortage of 15m health workers at the global level by 2030.

Similarly, the WHO (2020) also predicted that the world would require extra 9m nurses and midwives to attain the Sustainable Development Goal 3 on health and wellbeing by 2030. Analyses from Liu et al. (2016) and the WHO (2020) suggest that the upper-middle-income countries would have the highest demand for health workers due to their population growth, increasing number of aging population, and the economic growth, which can result in competition for skilled nurses at the global level. The low-income countries would also experience shortages of nurses, as the needs of the low-income countries would exceed supply and demand despite the low growth in demand and supply of nurses, the increasing level of chronic and non-communicable diseases, the normal growth of population, and the increasing level of aging population. For example, in their publication the *World Population Prospects: The 2017 Revision*, the Department of Economic and Social Affairs of the United Nations (United Nations, 2017) predicted that the global population is projected to reach at 8.6bn in 2030 and 9.8bn in 2050 from the current level of the global population of 7.6bn. According to the United Nations (2017), the higher life expectancy and the lower fertility rates also resulted in the growth of the number of ageing populations across the world. Consequently, it could be argued that, due to the growth in population and the number of aging population, there would be growing demand for nurses in the future. On the other hand, the shortages of nurses can result in increasing number of errors, higher morbidity, and mortality rates, and therefore it is imperative to meet the needs of nurses while offering the best and safest healthcare services to the patients (Haddad et al., 2020).

Nurses receive considerable attention when there are crises like shortage of nurses (Drennan & Ross, 2019; Marc et al., 2018; Morgan & Mary, 2009). Consequently, it has become a concern for the nursing administration to pay attention when makes nurses satisfied or dissatisfied in their profession and practices. A number of studies, for example Abualrub (2007); McHugh et al. (2011); Scanlan & Still (2019); Toh et al.

(2012); Zarea et al. (2009) have confirmed that nursing shortage is a constraining factor in the development of an optimum level of the delivery of healthcare across the world. For example, the study of Toh et al. (2012) demonstrated that there is a positive association between the shortage of nurses, their job dissatisfaction, stress, and burnout. This study highlighted the significance of adequate staffing of nurses, as nursing shortage could have damaging effects on the nurses' wellbeing, which can negatively affect the performance of the nurses in the end. Additionally, the study of Scanlan & Still (2019) found that there exists a strong negative correlation between the nurses' turnover and their job satisfaction, arguing that the intention to leave the profession is a strong predictor of job turnover.

Analyzing the working conditions of 12 European countries, the study of Aiken et al. (2002) demonstrated that working conditions are a strong predictor of job dissatisfaction among the nurses, which result in high turnover, and therefore this study argued that the shortages of nurses would remain as a problem in the coming days. Additionally, this study has also found that healthcare service providers in these 12 countries have been rationing the care, which also raise concern that undermines the quality of care and the safety of the patients. Other contributing factors of job turnover among the nurses are age, tenure, satisfaction with the job, commitment to the organisation, managers' leadership styles, and nurses' opportunity to advancement (Abualrub, 2007; Aiken et al., 2002; McHugh et al., 2011; Scanlan & Still, 2019; Toh et al., 2012; Zarea et al., 2009). Therefore, nurses' job satisfaction defined as the reported experience of the job satisfaction among the nurses related to their existing job. Job satisfaction considered as a complex phenomenon that affected by various elements and thought to be a set of attitudes towards different features of the job, including working environment, organisational aspects, payment, and workgroups (Hwang et al., 2009; Tervo-Heikkinen et al., 2008). Therefore, considering the crucial role of the nurses and the current and future supply and demand of the nurses, it is instrumental to recruit and retain the skilled nurses who will provide frontline services to the public healthcare. Additionally, nurses are interesting because of their job characteristics, as

they are highly vulnerable to secondary traumatic stresses (Morrison & Joy, 2016). Furthermore, the study of Edward et al. (2014) found that the nursing profession has the most vulnerability of experiencing violence and aggressions from the patients and their families. All these aspect of the nursing profession further contribute to the higher degree of burnout, affecting the workplace environment and contexts negatively (Gomez-Urquiza et al., 2017). Therefore, it is important to assess the reasons behind the job dissatisfaction among the nurses, particularly in a developing country like the Kingdom of Saudi Arabia (hereafter the KSA, Saudi Arabia, 'the Kingdom', or 'the country'). This study has mainly focused on the nurses in Saudi Arabia, and as a research focus, the Saudi Arabian healthcare industry has been discussed in the next section.

Aim of the Research

Although a number of studies (e.g. (Alboliteh et al., 2017; Al-Dossary, 2018) have tried to find out the reasons behind the chronic shortage of nurses in Saudi Arabia and have tried to evaluate the changing face of healthcare systems in the Kingdom due to the growing population and rapid advancements in technologies, there is no study that has determined the factors that cause job satisfaction among nurses, particularly nurses working in the Emergency Department (ED) in hospitals in in Saudi Arabia. It has been previously noted that the nursing profession in Saudi Arabia has a poor image, negatively affecting the retention of skilled nurses within the workforce. Thus, this research will facilitate to understand and will be contributory to recruitment and retention of nurses in the ED in Saudi Arabia. Therefore, this study has explored, analysed, and identified the factors that affect the level of job satisfaction among nurses who work in the ED in the public hospitals in Saudi Arabia. In order to develop a clear understanding, a number of determinants of job satisfaction have been established by reviewing the existing literature. Additionally, this study has adopted an exploratory quantitative analysis that is founded on the data collected from a questionnaire that have demographic relationships among the determining factors of job satisfaction. Additionally, the outcomes of this research can offer a clear vision on how to motivate and enhance the job

satisfaction among the nurses working in the public hospitals in the Saudi healthcare systems.

Research Questions

In cooperation with a theoretical background, a quantitative method has been performed, through the execution of an online survey/questionnaire with an aim to assess the factors that affect the most the overall facets of job satisfaction among the nurses. Data gathered for this research has covered the relationships between the nurses' personal demographic aspects and their work environment, forming the nurses' expectations from their work environment that would eventually influence their job satisfaction. The online questionnaire was developed to collect data from a sample of at least 250 registered nurses in a public hospital in Asir region. Additionally, from the collected data, this research has established the correlations between socio-demographics of the nurses and the aspects that affect the nurses' job satisfaction level. Descriptive statistics were applied to analyse the outcomes of the survey for answering the following three research questions:

- What is the existing degree of job satisfaction among the nurses working in public hospitals in the Emergency Department in Saudi Arabia?
- What are the principal features that determine the job satisfaction among nurses working in public hospitals in the Emergency Department in Saudi Arabia?
- To which level the demographic aspects, such as age, gender, educational level, and number of children influence a higher degree of overall job satisfaction?

Literature Review

Nurses assume a significant role in public health services. A number of recent studies (e.g. Aljohani, 2019; Hellerawa and Adambarage, 2015; Khamisa et al., 2017) have revealed that a correlation exists between shortages of nurses and their job satisfaction, stress, and burnout. This finding accentuates the importance of job satisfaction among the nurses and

the appropriate staffing of nurses. Past studies on nurses' job satisfaction in the KSA were performed in one geographic location. Consequently, the aim of this research is to identify and explore the factors that influence job satisfaction of the nurses working in the KSA. Therefore, in pursuit to develop a better understanding of the factors, determinants, and indicators of job satisfaction among the nurses working in the KSA, this chapter has reviewed the existing literature on job satisfaction. At first, the search strategy has been explained, which has been followed by a review on the current definitions of job satisfaction. This chapter has then identified and reviewed the existing models and theories of job satisfaction. Three main types of models and theories of job satisfaction have been considered.

The selection of studies

The current study has followed the following inclusion and exclusion criteria, as shown in Table1:

Table 1: The inclusion and exclusion criteria for literature search

	Inclusion	Exclusion
Participants	The participants must be trained nurses All the participants must be staff nurses (no head nurse or supervisor) Must have certificate/diploma/degree All the participants must be working as full time job	Nursing Supervisory, Head Nurse, Faculty members of other groups such as (doctor, dentist, pharmacist, midwife, etc.), Poster, presentation, Editorials
Design	Randomized controlled trials Non-randomized controlled trials Quasi-experimental designs (cross-sectional, cohort, longitudinal, prepost-test) Qualitative studies	
Objectives and Outcome	Objectives and outcomes related to job satisfaction	Main theme, objective and outcomes not related to job satisfaction in (Nurse Educators, Nurse Faculty, Nurse Teachers, Academic Nurses)
Lagrange Publication	English Published	Other languages Non-Published

Time	Peer-reviewed (Only for articles and Research Briefs) 2005 – 2019	Not peer-reviewed
Overlapping	In cases where one or more articles extracted from a researcher's dissertation or thesis were available, the dissertation or thesis was selected. In cases where the results of a research by one researcher were published several times under different titles, the most recent and comprehensive article by the researcher was used. The articles whose participants were a combination of nurses and nurse educators but the results were reported separately for each group were included	

Definitions of Job Satisfaction

The notion of job satisfaction has been explored since the beginning of the 21st century and can be traced back to Taylor's (1911, cited in Harper and Mousa, 2013) scientific management study that focused on the standardisation of production and the enhancement of practices and techniques for reducing workers' fatigue. Another seminal work of Professor Elton Mayo – the Hawthorne experiment – demonstrated that there are various complex and internal variables that result in differences in individuals' motivation (Mayo, 1933, cited in Broches, 2008), focusing on managerial strategies related to socio-psychological aspects of human behaviours in organisations. The work of Hoppock (1935) introduced the auspicious beginning of research on job satisfaction, and since then the literature on job satisfaction has had its ebbs and flows. For example, Locke's (1976) influential review on job satisfaction revealed that more than 3,300 studies were conducted on job satisfaction by 1972, while Spector (1997) found that the number of studies on job satisfaction increased to more than 12,400 by 1991. However, using the PsycINFO database, a review on job satisfaction by Judge et al. (2002) found more than 7,856

studies were conducted on job satisfaction since 1973. Despite these ebbs and flows, these statistics suggest that job satisfaction is probably the most widely researched topic in all organisational and industrial psychology fields.

The Situational Theories of Job Satisfaction

The situational theories of job satisfaction assume that job satisfaction is determined two aspects, such as the characteristics of the situations, and the occurrences of the situations (Worrell, 2004). Under this category, there are four prominent theories that have tried to explain the factors that work as antecedents of job satisfaction, such as Maslow's hierarchy of needs theory, Herzberg's two-factor model, social information processing model, and job characteristic model.

Maslow's Hierarchy of Needs Theory

Arguably, Maslow's hierarchy of needs theory is one of the earliest and most widely used theories for exploring the structure of factors that contribute to job satisfaction (Nwagwu, 2015; Seguin, 1997). Originally developed in 1942 and published in 1943 (Healy, 2016), Maslow (1976) proposed that human's needs could be categorised into five groups, which could be arranged from the most fundamental needs to the most advanced needs. According to Maslow (1976), these needs are arranged from lower to higher orders, such as the fundamental physiological needs; safety and security needs; social needs; self-esteem needs; and self-actualisation needs, as shown in Figure 1.

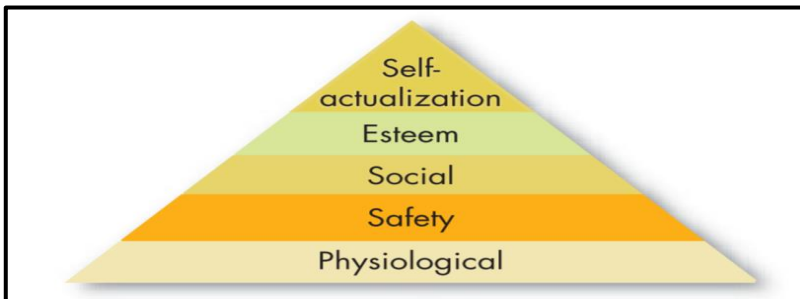


Figure 1: Maslow's (1976) hierarchy of needs (adapted from Robbins & Judge, 2013)

The most fundamental level in the hierarchy is the physiological needs, which refer to human's unlearned primary needs, such as the need for oxygen, hunger, thirst, shelter, sleep, relief from pain, sensory pleasure, maternal behaviours, and probably sexual desire (Gibson et al., 2009; Mullins, 2010). The second level in the hierarchy is the safety needs that are approximately similar to the security needs, including the concerns relating to protection from both physical and emotional harm, such as freedom from threat of physical attack, shelter from bad weather, and the need for orderliness and predictability (Mullins, 2010; Robbins & Judge, 2013). The third level in the hierarchy is the social needs that refer to the interpersonal relationships with others, such as affection, the need for friendship, belongingness, acceptance, love, care and support (Gibson et al., 2009; Mullins, 2010). The fourth level in the hierarchy is the esteem needs that represent the higher needs for humans. Finally, the culmination of the hierarchy is the needs for self-actualisation that facilitates an individual developing and realising his/her full potentials (Luthans, 2011).

Despite the wider acceptance as a useful framework to categorise the reasons for work among the researchers (Spear, 2006), Maslow's (1976) hierarchy of needs theory has a number of weaknesses. For example, Gibson et al. (2009) noted that there is not enough empirical evidence that supports the existence of hierarchical needs.

Herzberg's Two-Factor Theory

Herzberg and his colleagues developed the two-factor theory in 1957, which is also known as the motivation-hygiene theory (Jones, 2011). According to Jones (2011), similar to Maslow's (1976) hierarchy of needs theory, Herzberg's two-factor theory has also received considerable importance in the research of job satisfaction. Herzberg et al. (1987) included achievement, recognition, and the intrinsic values of the job as the factors in the first group. On the other hand, the second group, which is known as the hygiene factors, could result in dissatisfaction when they are not fulfilled, but they would not cause any satisfaction even when they are adequately available. Herzberg et al. (1987, p.87) used the term 'hygiene' as 'an analogy to the medical use of the term meaning preventive and

environmental', and the hygiene group contains factors like pay, working environment, and job security.

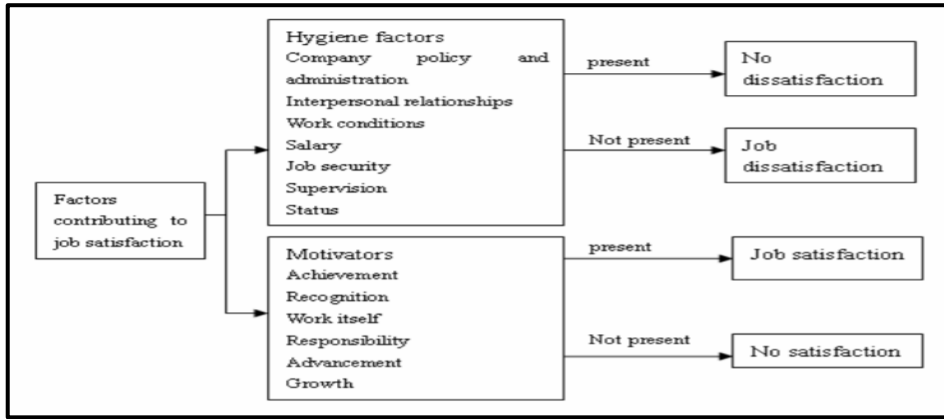


Figure 2: Herzberg's two-factor model

Herzberg's two-factor theory has been used for determining and identifying the level of job satisfaction in research in various international settings. Many studies in nursing populations have applied Herzberg's two-factor theory to research job satisfaction, and several studies have also applied the theory as a conceptual framework (i.e., Jones, 2011; Kacel et al., 2005; Lephallala, 2006; Mitchell, 2009; Russell & Gelder, 2008). For example, Kacel et al. (2005) applied Herzberg's two-factor theory as a conceptual framework in their research to assess the level of job satisfaction among 147 nurses in Midwestern area in the USA. The quantitative descriptive research of Kacel et al. (2005) demonstrated that both the motivating and hygiene factors worked as contributing factors in the participating nurses' job satisfaction. This study also revealed that the participating nurses had higher level of job satisfaction when two hygiene factors, such as salaries and compensation were increased. The study of Lephallala (2006) also used Herzberg's two-factor model to find out the factors that influence the turnover rate among the nurses in selected private hospitals in the UK. This quantitative descriptive study demonstrated that motivating or intrinsic factors can influence the level of employee turnover and job satisfaction among the nurses, while the extrinsic or hygiene factors

like salary and administration policies increased the level of dissatisfaction among the nurses.

Proposed Research Model

Based on the conclusion on the literature review on job satisfaction, this study assumes that job satisfaction is a universal concept, which is determined by various factors, which can be categorised into three groups, such as individual characteristics, intrinsic job characteristics, and extrinsic job characteristics.

As individual characteristics, the study has included age, educational level, gender, position, tenure, and marital status as factors that influence job satisfaction. As extrinsic job conditions, this study has included salary, supervision, workload, working conditions, interpersonal relationships, administration, status, and work schedule as factors that influence job satisfaction. Finally, as the intrinsic job characteristics, this study has included achievement, feedback, responsibility and autonomy, personal growth, fairness, job security, work value, and cooperation with other departments as factors that influence job satisfaction.

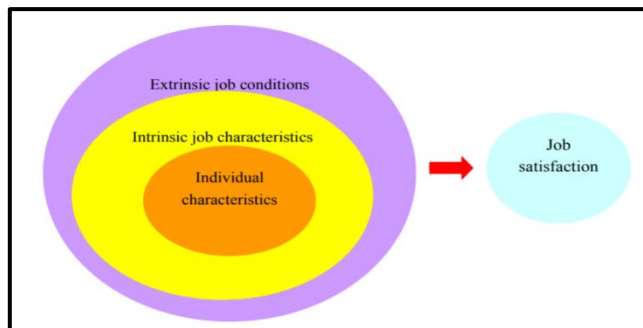


Figure 3: Proposed research model

Research Methodology

Research Objectives and Research Hypotheses

There are four research objectives of this study, which are:

- To identify the factors that influence the job satisfaction of nurses working in Asir Central Hospital (ACH);
- To assess the relationships among demographic variables of the

nurses with their level of job satisfaction;

- To provide ways of motivation and improvement of job satisfaction among the nurses by the nursing managers; and
- To facilitate developing strategies for the promotion of nursing profession by the policy makers as part of the workforce planning.

Based on the literature review, this study aims to test the following hypotheses:

H1: The existing level of job satisfaction among the nurses in ACH is low;

H2: Extrinsic rewards are the most influencing factors in job satisfaction among the nurses in ACH.

H3: Demographic factors, such as gender, age, and educational levels are strong predictor of overall job satisfaction level.

Study Design and Sampling

A descriptive survey was conducted in September 2020. The population of this study comprises all nurses who work under the Ministry of Health (MoH), and the ACH has been selected to collect data from the sample participants. To collect data from the nurses, an official permission was obtained from the ACH for ethical approval. A total of 285 nurses were identified based on the inclusion and exclusion criteria, and a questionnaire was sent to these identified nurses through email once the official permission is obtained from the responsible authorities. The researcher explained the tool used for the collection of data in the questionnaire explicitly. Additionally, the participants were ensured that all the collected data are confidential under the Data Protection Act, and the participants' anonymity is confirmed through the non-collection of identifiable personal data like name, address, or contact details. To complete the questionnaire, it has been estimated that participants would require around 6 minutes. This short duration to complete the questionnaire was considered as a positive aspect, which also influenced the nurses positively to respond to the questions, considering the busy characteristics of the nurses' jobs.

Survey Construction

The literature review revealed that the factors that influence the job satisfaction generally can be grouped into four categories, such as personal factors, factors related to the job, organisational factors, and environmental factors. Based on these categories, this study has used a number of instruments that are frequently used to assess the level of job satisfaction among the employees, such as the Job in General Scale (JIG), Job Satisfaction Scale (JSS), McCloskey/Mueller Satisfaction Scale (MMSS), Nurse Satisfaction Scale (NSS) and Revised Nursing Work Index (NWI-R). Elements from these job satisfaction instruments were included in the questionnaire, and they were categorised into eight groups: extrinsic rewards; career development opportunities; working itself; resources; schedule; autonomy; relationship with management and social communication, and the most frequently appeared items within the questionnaires were selected. The questions in the questionnaire were developed based on a 5-point Likert Scale, where items were recorded from 1 (not satisfied at all) to 5 (very satisfied). The first part of the survey aimed to collect the socio-demographic data of the respondents. This information was collected through items, such as age, gender, education level, work experience, among others. These data helped to answer the third research question of this study. It is significant to take care of the sensitivity of some of the personal items, for example such as wages, marital status, and the number of dependents or children, which may affect the respondents' willingness to answer these questions honestly.

Data Collection

With the permission from the ACH's authority, participants were provided a set of questionnaires, along with an invitation letter of this research that contained information regarding the research, for example the research purpose, the research procedure, and the study's significance. Participants were requested for agreement and consent of anonymity.

The survey was first designed and developed in English, and then translated it into Arabic to accommodate the participants in a better way. The researcher conducted a pilot test for the questionnaire that involved

three participants under the targeted population to check and make sure that the participants understand the questions in the questionnaire in a comprehensible way. Any wrong wording was removed and refined, as well as it was later adjusted to fit within the context and the target respondents' job characteristics, and this is carried out based on the feedbacks that came out from the participants who took part in the pilot study.

Ethical Consideration

The study required permission from the authority of the Asir Central Hospital. The researcher obtained an official letter from the university that clearly explained the purposes of the study. The survey questions did not collect any personal information and data from the participants that could identify them. The study did not collect name, address, and contact details. Data codified for identification and stored in computer files with password protected. The information sheet, which was sent along with the questionnaire, made explicit clarification to the respondents that their participation would be voluntary and anonymous. The participants were clearly informed by writing that they have every right to withdraw from the survey at point of time if they find any potential risks for them. There would not be any penalty for withdrawing from the study, as the participation is voluntary in nature. The academic usage of the data and how the data would be published was also communicated to the participants.

Data Analysis and Interpretation

To fulfil the aim of the current study, sociodemographic aspects and the factors that influence the job satisfaction have been analysed through a quantitative research method based on an online survey. This chapter has presented the general outcomes of the survey, providing both the demographic data and the aspects of job satisfaction data that were derived from the questionnaire, as well as the test for normality for the data. To meet the aim of the current research, there are three-research question for this study, which are:

- What is the existing degree of job satisfaction among the nurses working in public hospitals in the Emergency Department in Saudi Arabia?
- What are the principal features that determine the job satisfaction among nurses working in public hospitals in the Emergency Department in Saudi Arabia?
- To which level the demographic aspects, such as age, gender, educational level, and number of children influence a higher degree of overall job satisfaction?

General Outcomes of the Study

In order to present an overview of the general outcomes, the main results have been presented. As previously noted in the methodology chapter, the current study's survey has been developed into two major sections based on the study purpose. The first section of the questionnaire is related to the collection of demographic data in order to describe the sample, along with the establishment of correlations between the aspects that affect job satisfaction for answering the third research hypothesis. Similarly, the second section has been aimed to collect data associated with both the factor specific and the overall level of job satisfaction among the sample nurses. Consequently, a disclosure of the important outcomes of both the sections has been presented.

Descriptive Statistics of the Demographics

The online survey was published from the 5th September 2020 and was closed on the 12th September 2020. The total number of respondents in the sample was 285 nurses that produced a total of 267 completed answers. The outcomes of this study are based on the only the completed surveys and thus a total of 18 uncompleted survey answers were not considered for this research. The first part of the questionnaire has collected the demographic data from the respondents for understanding the sample as well as for establishing correlations on some of the demographic aspects and the eight

job satisfaction aspects that have been included in the second section of the questionnaire.

Table 2: Demographic statistics of the sample

Gender	Count	Percentage
Female	114	43%
Male	153	57%
Total	267	100%
Nationality	Count	Percentage
Non-Saudi	42	16%
Saudi	225	84%
Total	267	100%
Age	Count	Percentage
18-30 years	144	54%
31-40 years	86	32%
41-50 years	30	11%
51-59 years	7	3%
Total	267	100%
Work Experience	Count	Percentage
1 year and less than 3 years	52	19%
3 years and less than 5 years	41	15%
5 years and less than 10 years	43	16%
Less than one year	54	20%
More than 10 years	77	29%
Total	267	100%
Employment Type	Count	Percentage
Permanent	221	83%
Temporary	46	17%
Total	267	100%
Employment Contract	Count	Percentage
Full-time	231	87%
Part-time	36	13%
Total	267	100%
Marital Status	Count	Percentage
Married	139	52%
Separated/Divorced	5	2%
Unmarried	123	46%

Total	267	100%
Number of Children	Count	Percentage
1-2	61	23%
3-4	45	17%
5 and more	17	6%
No children	144	54%
Total	267	100%
Level of Education	Count	Percentage
Bachelor	79	30%
Doctorate	4	1%
Highest nursing diploma	149	56%
Masters	35	13%
Total	267	100%

Out of the 267 selected respondents, Table 2 shows that 57% of the respondents were male and 43% of the respondents were female. This is in line with the findings of Aboshaiqah et al. (2018), but contrasting to the outcomes of the studies that focused on other counties, for example Ayivi-Guedehoussou (2016); Khunou & Davhana-Maselesele (2016); and Liminana-Gras et al. (2013), which found that the nursing profession is traditionally female dominated industry. These studies have found that there is a long-standing assumption that caring is a natural feminine aspect that has influenced the development of nursing as a profession. Additionally, this assumption has also influenced the type of education and training nurses require performing their professional tasks. However, this study has found that Saudi Arabia has higher number of male nurses compared to the total number of female nurses. This has been supported by Hargreaves (2019, p.260), stating that ‘there is even a surplus of male nursing graduates, with thousands of graduates on waiting lists for nursing jobs’. Additionally, the male-female segregation rule in workplaces and daily life also makes women difficult to work in hospitals.

Table 2 also demonstrates that 84% of the respondents were Saudi nationals, while 16% of the respondents were non-Saudi nationals. This finding is in accordance with the findings of Al-Hanawi et al. (2019),

showing that the number of Saudi nationals in the healthcare sector has been increasing steadily in recent times. With the increasing population growth, the Saudi health sector required a restructuring, which was proposed by the McKinsey Global Institute (MGI, 2015) in 2015. Consequently, Saudi Arabia developed a new strategic plan for the country in 2016, which is generally known as the Vision 2030. The MGI envisaged that there would be more than 6m new jobs for the Saudi nationals to double the country's GDP (Gross Domestic Product) by 2030. The MGI also recognised eight sectors, including the health sector that has the opportunity for generating nearly 60% of growth. Additionally, one of the aspects of the Vision 2030 is the localisation of the workforce, which is generally known as the Saudization, and it provides an opportunity for the Saudi citizens to take jobs in the government sectors.

In relation to the age of the respondents, Table 2 shows that 54% of the respondents belong to the 18-30-year age group, while 32% of the respondents belong to the 31-40-year age group, 11% of the respondents belong to the 41-50-year age group, and only 3% of the respondents belong to 51-59-year age group. This finding suggests that Saudi nurses are relatively young, and the study of Alboliteh et al. (2017) supports this finding. This finding is in contrast to the average age of the nurses in most the Western countries. For example, the average age of the nurses in the UK, the USA, and Australia was reported at 44 years, 47 years, and 44.5 years respectively (AACN, 2013; AIHW, 2013). However, it should be noted in here that the current research applied online survey as a medium of data collection, and young generation has the propensity to spend more time online and social media.

In relation to the work experience, 29% of the respondents had 'more than 10 years' of work experience in the ED, while 20% of the respondents had work experience of 'less than one year'; 19% of the respondents had work experience of '1 year and less than 3 years' in the ED; 16% of the respondents had work experience of '5 years and less than 10 years' in the ED; and 15% of the respondents had work experience e of '3 years and less than 5 years'. Overall, 54% of the respondents had work

experience of less than 5 years in the ED, and this finding suggests that Saudi nurses are inexperienced and relatively young, and this finding is in accordance with the findings of Alboliteh et al. (2017). In relation to the employment types, 83% of the respondents had permanent employment type, as they work under the MoH. Similarly, in relation to the employment contract, 87% of the respondents had full-time employment contract, and only 13% of the respondents had part-time employment contract. This is because working under the MoH is related to the full-time employment contract. In relation to the respondents' marital status, 52% of the respondents were married, while 46% of the respondents were unmarried, and only 2% of the respondents were separated/divorced. In relation to the number of children, 54% of the respondents did not have any children, while 23% of the respondents had the number of children between 1 and 2; 17% of the respondents had the number of children between 3 and 4; and 6% of the respondents had the number of children of 5 and more. In relation to the level of education, 56% of the respondents had the highest nursing diploma; while 30% of the respondents had 'bachelor' degree; 13% of the respondents had 'masters' degree; and 4% of the respondents had 'doctorate' degree. This finding suggests that all the respondents had appropriate education in their nursing profession.

4.2.2. Job Satisfaction

Table 3: The mean value of each item, the average value of each construct, and the overall value of job satisfaction level among the nurses

Factors of Job Satisfaction	Mean Value	Average
1. EXTRINSIC REWARD		
Remuneration	3.46	3.11
Compensations working during the weekends	3.02	
Compensations working during evenings and nights	2.84	
2. DEVELOPMENT OPPORTUNITIES AND PROMOTION		
Opportunities for promotions	3.17	3.21
Extent of preparatory training	3.31	
Extent of training for using apparatuses and equipment	3.34	
Provisions for continuous training	3.19	
Provisions for pursuing further education	3.03	
3. WORKING CONDITONS		
3.1. RESOURCES: A. Equipment and facilities		

Capability to carry out good care services for the patients	3.68	3.49
Facilities provided by the hospital	3.45	
Regular updates on the medical equipment	3.34	
3.1. RESOURCES: B. Human Resources		
Availability of sufficient nurses for providing quality services to the patients	3.10	3.31
Opportunity to carry out tasks with nurses who have high competencies at the clinical level	3.51	
3.1. RESOURCES: C. Quality of Service		
The quality level of overall delivery of services to the patents is high	3.55	3.58
Availability of support services sufficiently	3.51	
Reliability and efficiency of the information system related to the patients	3.69	
3.2. WORK ITSELF		
The amount of workloads	3.24	3.17
The general daily routines	3.27	
Adequate opportunities and time for discussions with other nurses regarding the level of service delivery to the patients	3.13	
Availability of breaks during the shifts	3.24	
The level and availability of policies to compensate for overtime	2.99	
3.3. SCHEDULE		
Flexibilities for taking holidays and vacations	3.07	3.19
The level of scheduling flexibility related to working hours	3.21	
The availability of weekends off each month	3.28	
The level of balance between work and personal life	3.20	
3.4. AUTONOMY		
The level of opportunity for influencing decisions related to the organisation	3.31	3.29
The level of freedom for making own decisions on tasks and the delivery of services to the patients	3.31	
The level of available opportunity for serving in committees related to nursing and hospital	3.24	
4. SOCIAL RELATIONSHIP AND COMMUNICATION		
The available level of communications with colleagues within the department	3.81	3.57
The available level of communications with the physicians	3.70	
The level of resolution of conflicts between the colleagues	3.62	
The availability of routines for solving conflicts among the colleagues	3.41	
The level of opportunities of social contacts during shifts	3.53	
The level of professional interactions with other departments	3.44	
Opportunity to determine the appropriate levels of staffing by the nurses who provide patient care services	3.48	

5. RELATIONSHIP WITH MANAGEMENT		
The levels of competencies of the line managers	3.48	3.33
The opportunities to communicate with the managers	3.46	
The levels of opportunity for making contacts with the management for opinions and enquires	3.24	
The levels of supervisions by the managers	3.41	
The levels of encouragements and positive feedbacks	3.26	
Availabilities of measurements to address the levels of satisfaction among the nurses	3.13	
Overall Satisfaction	3.33	

The job satisfaction section contained (41) items that have been grouped into five constructs, which are:

- Extrinsic reward,
- Development opportunities and promotion
- Working conditions
- Social relationships and communications
- Relationships with the management

Additionally, the working condition construct has been divided into four sub-construct, which are:

- Resources (Equipment and facilities; human resources; and quality of services)
- Work itself
- Schedule, and
- Autonomy

From Table. (3), it can be observed that the highest average value is 3.58, which is related to the quality of service, and this is followed by the average value of social relationship and communication with 3.57; equipment and facilities with value of (3.49); relationships with the management with a value of 3.33; human resources with a value of 3.31; autonomy with a value of 3.29; development opportunities and promotion with a value of 3.21; schedule with a value of 3.19; work itself with a value of 3.17; and the extrinsic reward with a value of 3.11, as shown in Table. (4). The overall job satisfaction was 3.33, which is above the value of 3 on a five-point Likert scale. Therefore, nurses in the ACH had overall higher job

satisfaction, and therefore the first hypothesis - the existing level of job satisfaction among the nurses in ACH is low – has been rejected.

Table 4: Ranking of the job satisfaction constructs

Job Satisfaction Constructs	Average
WORKING CONDITONS: RESOURCES: Quality of Service	3.58
SOCIAL RELATIONSHIP AND COMMUNICATION	3.57
WORKING CONDITONS: RESOURCES: Equipment and facilities	3.49
RELATIONSHIP WITH MANAGEMENT	3.33
WORKING CONDITONS: RESOURCES: Human Resources	3.31
WORKING CONDITONS: AUTONOMY	3.29
DEVELOPMENT OPPORTUNITIES AND PROMOTION	3.21
WORKING CONDITONS: SCHEDULE	3.19
WORKING CONDITONS: WORK ITSELF	3.17
EXTRINSIC REWARD	
Overall	3.33

4.3. Test of Normality

It is important to test the normality of the data, as normality test determines whether sample data has been drawn from a normally distributed population, and data drawn from abnormally distributed population can result in invalid interpretations and conclusions (Park, 2008). According to Ghasemi & Zahediasl (2012), the assumptions of normality are particularly crucial when developing reference intervals for variables. Ghasemi & Zahediasl (2012) also noted that normality should be considered seriously, for when these assumptions do not hold, it becomes difficult to make reliable and accurate conclusions regarding the reality. Therefore, the Shapiro-Wilk test has been performed to make sure that the random sample from the study has come from normal distribution. As shown in Figure 4, the data in this research is normally distributed, with the p-value of 0.974332, suggesting that 97.4% of the data are normally distributed. According to Shapiro & Wilk (1965), passing the normality test confirms with 95% confidence that data fit with the normal distribution. The Shapiro-Wilk test has performed on the overall average score of job satisfaction and assessed through the eight constructs of job satisfaction.

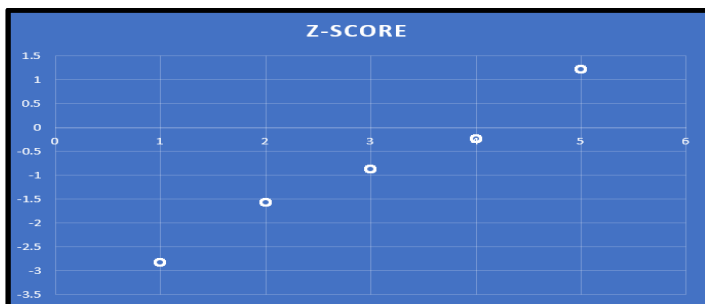


Figure 4: Normality test of the data

4.4. Pearson Correlations

	Overall Job Satisfaction	Extrinsic Reward	Development	Working Conditions - Resources	Working Conditions- Work Itself	Working Conditions -Schedule	Working Conditions - Autonomy	Social Relationships and Communications	Relationship with Management
Overall Job Satisfaction	1								
Extrinsic Reward	0.732616674	1							
Development	0.847113051	0.678449	1						
Working Conditions-Resources	0.882122934	0.560008	0.735984291	1					
Working Conditions-Work Itself	0.873547887	0.676909	0.71357566	0.707907	1				
Working Conditions-Schedule	0.847903749	0.625604	0.667540624	0.6652132	0.7687043	1			
Working Conditions- Autonomy	0.860238854	0.629282	0.744180204	0.7292856	0.7357089	0.7536634	1		
Social Relationships and Communications	0.868997137	0.513502	0.626742623	0.72709	0.7078691	0.7120157	0.7217536	1	
Relationship with Management	0.862031333	0.544215	0.64251386	0.7219678	0.6808887	0.6609947	0.664507	0.77920028	1

Figure 5: Determinants of job satisfaction

The second research question of this study is: What are the principal features that determine the job satisfaction among nurses working in public hospitals in the Emergency Department in Saudi Arabia? For answering this second research question, the Pearson correlation index has been performed. It has been previously mentioned that the survey contained 41 items that were grouped into 8 constructs, such as extrinsic reward, development, working conditions – resources, working conditions – work itself, working conditions – scheduling, working conditions – autonomy, social relationships and communications, and relationships with management. Figure 5 demonstrates that there are considerable correlations exist between these eight constructs.

Table 5: Ranking of the job satisfaction determinants

Job Satisfaction Determinants	Score	Ranking
Working Conditions-Resources	0.882123	1
Working Conditions-Work Itself	0.873548	2
Social Relationships and Communications	0.868997	3
Relationship with Management	0.862031	4
Working Conditions- Autonomy	0.860239	5
Working Conditions-Schedule	0.847904	6
Development Opportunities and Promotion	0.847113	7
Extrinsic Reward	0.732617	9

Table 5 has been developed from Figure 5 to rank the determinants of job satisfaction. Table 5 shows that the top ranking determinant of job satisfaction among the respondents was the working conditions that are related to the resources, which is followed by working conditions that are related to work itself; social relationships and communication; relationships with management; working conditions that are related to autonomy; working conditions that are related to scheduling; development opportunities and promotions; and extrinsic rewards. Considering Table 5, the second hypothesis of this study – extrinsic rewards are the most influencing factors in job satisfaction among the nurses in ACH – has been rejected. In fact, extrinsic reward has been considered as the least important factor of job satisfaction among the nurses.

Table 6: Regression analysis of the relationship between extrinsic reward and the other determinants of job satisfaction

SUMMARY OUTPUT	
<i>Regression Statistics</i>	
Multiple R	0.7444
R Square	0.5541
Adjusted R Square	0.5420
Standard Error	0.6691
Observations	267
ANOVA	

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	7	144.07395	20.58199	45.97074	0.25531
Residual	259	115.95934	0.44772		
Total	266	260.03329			
	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	0.6865	0.1968	3.4881	0.0006	0.2989
Development	0.3482	0.0719	4.8455	0.2177	0.2067
Working Conditions-Resources	-0.0721	0.0870	-0.8289	0.4079	-0.2434
Working Conditions-Work Itself	0.3244	0.0790	4.1081	0.0054	0.1689
Working Conditions-Schedule	0.1389	0.0697	1.9927	0.0473	0.0016
Working Conditions- Autonomy	0.1226	0.0813	1.5078	0.1328	-0.0375
Social Relationships and Communications	-0.1615	0.0940	-1.7170	0.0087	-0.3466
Relationship with Management	0.0766	0.0676	1.1331	0.2582	-0.0565

Table 6 also shows that the p -value = 0.255306, which is higher than 0.05, and therefore hypothesis two has been rejected that. However, extrinsic reward has statistical significance with working conditions – work itself ($p=0.0053<0.05$), which has a positive relationship with extrinsic value with a value of 0.32443. Similarly, extrinsic reward has statistical significance with working conditions – scheduling ($p=0.04733<0.05$), which has a positive relationship with extrinsic value with a value of 0.138889. Moreover, extrinsic reward has statistical significance with social relationships and communications ($p=0.008717<0.05$), which is negatively related with extrinsic value with a value of -0.16146.

4.5. The Relationship between Job Satisfaction and Socio-Demographics

The third and final hypothesis of the current research is: Demographic factors are strong predictor of overall job satisfaction level. In relation to the demographic factors, this study has considered gender, age, and education factors to find out whether these factors have influence on the

respondents' job satisfaction. In relation to gender, this study has used dummy variables, for male = 1, and for female = 0.

Table 7: Regression analysis of the relationship between gender and the determinants of job satisfaction

SUMMARY OUTPUT					
<i>Regression Statistics</i>					
Multiple R	0.22394				
R Square	0.05015				
Adjusted R Square	0.02070				
Standard Error	0.49041				
Observations	267				
ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	8	3.27613	0.40952	1.70275	0.097954
Residual	258	62.04971	0.24050		
Total	266	65.32584			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	0.54844	0.14759	3.71591	0.00025	0.25780
Extrinsic Reward	0.06818	0.04554	1.49711	0.13559	-0.02150
Development	-0.05357	0.05501	-0.97381	0.33106	-0.16189
Working Conditions-Resources	-0.02511	0.06383	-0.39339	0.69436	-0.15081
Working Conditions-Work Itself	0.05378	0.05974	0.90027	0.36882	-0.06386
Working Conditions-Schedule	0.07972	0.05147	1.54872	0.12267	-0.02164
Working Conditions- Autonomy	-0.02643	0.05986	-0.44157	0.65917	-0.14431
Social Relationships and Communications	-0.12777	0.06931	-1.84335	0.04664	-0.26426
Relationship with Management	0.05722	0.04968	1.15181	0.25046	-0.04060

Table 7 demonstrates the output of regression analysis of the relationship between gender and the determinants of job satisfaction. From

Table 7, it is observed that the F-value is 0.097954, which is greater than 0.05, and therefore it can be concluded that gender does not have any effect on the determinants of job satisfaction, and thus it can be argued that demographic factor like gender is not a strong predictor of overall job satisfaction level. However, Table 7 reveals that gender has a negative relationship with social relationships and communications with statistical significance of 0.04664(<0.05). Due to the prevailing segregation rule in the KSA, there is a negative relationship between gender and social relationships and communications.

In relation to age, this study has used dummy variables for 18-30 years = 1; 31-40 years = 2; 41-50 years = 3; and 51-59 years = 4, assuming that older nurses have higher job satisfaction.

Table 8: Regression analysis of the relationship between age and the determinants of job satisfaction

SUMMARY OUTPUT					
Regression Statistics					
Multiple R	0.283332				
R Square	0.080277				
Adjusted R Square	0.051759				
Standard Error	0.765885				
Observations	267				
ANOVA					
	df	SS	MS	F	Significance F
Regression	8	13.20937	1.651171	2.814916152	0.005224
Residual	258	151.3374	0.586579		
Total	266	164.5468			
	Coefficients	Standard Error	t Stat	P-value	Lower 95%
Intercept	1.119482	0.230498	4.856801	0.007067381	0.665585
Extrinsic Reward	0.212189	0.071123	2.983412	0.003123716	0.072134
Development	0.031306	0.085906	0.364422	0.715841659	-0.13786
Working Conditions-Resources	-0.09674	0.09969	-0.97037	0.332770489	-0.29304
Working Conditions-Work Itself	0.071758	0.093296	0.76914	0.442513876	-0.11196
Working Conditions-Schedule	0.038464	0.080386	0.47849	0.63270625	-0.11983

Working Conditions- Autonomy	-0.10509	0.093487	-1.12411	0.262012843	-0.28918
Social Relationships and Communications	0.177197	0.108248	1.636956	0.102858878	-0.03596
Relationship with Management	-0.16676	0.077579	-2.14953	0.032522603	-0.31953

Table 8 demonstrates the output of regression analysis of the relationship between age and the determinants of job satisfaction. From Table 8, it is observed that the F-value is 0.005224, which is lower than 0.05, and therefore it can be concluded that age has effect on the determinants of job satisfaction, and thus it can be argued that demographic factor like age is a strong predictor of overall job satisfaction level. Table 8 reveals that age has a relationship with extrinsic rewards with statistical significance of 0.003123(<0.05). Additionally, age has a negative relationship with relationships with management with statistical significance of 0.032522(<0.05). This may due to the work strains and retirement intentions that affect the older nurses' job satisfaction.

The last demographic factor in this study is the education levels, and this study has used dummy variables for the highest nursing diploma = 1, Bachelor degree = 2, Master degree = 3, and Doctorate = 4, assuming that high level of education, like Master degree and Doctorate degree more likely to provide a higher level of job satisfaction.

Table 9: Regression analysis of the relationship between education levels and the determinants of job satisfaction

SUMMARY OUTPUT						
<i>Regression Statistics</i>						
Multiple R	0.105293					
R Square	0.011087					
Adjusted R Square	-0.019577					
Standard Error	0.778009					
Observations	267					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Sig. F</i>	
Regression	8	1.7508	0.2188	0.3616	0.9399	
Residual	258	156.1668	0.6053			

Total	266	157.9176			
	<i>Coefficients</i>	<i>Std. Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	1.699	0.234	7.257	0.000	1.238
Extrinsic Reward	-0.024	0.072	-0.330	0.742	-0.166
Development	0.011	0.087	0.131	0.896	-0.160
Working Conditions-Resources	-0.059	0.101	-0.580	0.046	-0.258
Working Conditions-Work Itself	0.146	0.095	1.535	0.013	-0.041
Working Conditions-Schedule	-0.042	0.082	-0.510	0.611	-0.202
Working Conditions- Autonomy	0.015	0.095	0.162	0.872	-0.172
Social Relationships and Communications	-0.053	0.110	-0.484	0.629	-0.270
Relationship with Management	-0.013	0.079	-0.166	0.868	-0.168

Table 9 demonstrates the output of regression analysis of the relationship between education levels and the determinants of job satisfaction. From Table 9, it is observed that the F-value is 0.9399, which is higher than 0.05, and therefore it can be concluded that education levels do not have any effect on the determinants of job satisfaction, and thus it can be argued that demographic factor like education level is not a strong predictor of overall job satisfaction level. Table 9 reveals that education level has a negative relationship with working conditions – resources with statistical significance of 0.046(<0.05). This suggests that individuals with higher education level might easily percept and assess the improper working conditions or contexts that can negatively affect the individuals' mental and physical state, resulting in job dissatisfaction (Gurbuz, 2007).

Conclusions of the Data Analysis and Interpretations

In order to offer a foundation for the discussion of the outcomes of the current research, an overview of the hypothesis tests has been provided in this section. Hypothesis 1 has been rejected, as job satisfaction among nurses in the AHC in the ED is 3.33, which is higher than 3 in the 5-point Likert scale. Hypothesis two – extrinsic rewards are the most influencing factors in job satisfaction among the nurses in ACH has been rejected, as extrinsic rewards have the lowest ranking with a value of 0.732617 among all the eight determinants of job satisfaction. In relation to the third hypothesis, gender and education levels do not have any effect on the

determinants of job satisfaction, while age has effect on the determinants of job satisfaction.

Discussion

The first hypothesis of this research – the existing level of job satisfaction among the nurses in ACH is low – has been rejected, as the survey analysis revealed that the job satisfaction among nurses in the AHC in the ED has been reported at 3.33, which is higher than 3 in the 5-point Likert scale. This finding is in accordance with the finding of Alotaibi et al. (2015). Job satisfaction is a prerequisite for improving the quality of care in the healthcare system. The Saudi nurses in the ACH are moderately satisfied, as their working conditions in relation to the use of resources are satisfactory with a mean value of 3.58, while their social relationships and communications are also satisfactory. In fact, all the eight constructs of this survey have mean value higher than 3, which affected the overall value of the job satisfaction of the Saudi nurses. The moderate level of job satisfaction can be attributed to the place of work, as these nurses work under the MoH. Additionally, working conditions, utilisations of skills, and autonomy level have positively influenced the nurses' job satisfaction level. In fact, the current study considered both the intrinsic and extrinsic factors job satisfaction. The current study is mainly based on Herzberg's two-factor theory, and the study of Mitchell (2009) applied Herzberg's two-factor theory as a conceptual framework to assess the level of job satisfaction and burnout among 453 foreign nurses in Saudi Arabia. The study of Mitchell (2009) found that both the motivating and hygiene factors influence the nurses' level of job satisfaction. The study found various factors that contribute to the level of job satisfaction, such as recognition, the work itself, working environment, salaries, achievement, relationships with colleagues and supervisors, and organisational policies and administration. However, the outcome of this study is contradictory of the study of Alharbi et al. (2016), which noted that lower level of staffing, increasing workload, lack of autonomies, and lack of managerial support in relation to decision-making and participations in work scheduling were the contributing factors of low level of job satisfaction. Therefore, it can be inferred that the

theoretical model also affects the outcome of the study, and thus the outcomes are inconclusive.

Throughout this research, it has been noted that factors outlined related to job satisfaction should not be considered as mutually exclusive, but they should be also considered as mutually supportive. Therefore, the factors of job satisfaction should be viewed as interrelated that develop a system, which comprehends an approach that results in an inclusive job satisfaction among the nurses working in the ACH.

Considering the Table 5, it has been noted that the availability of resources in the working conditions has received the highest score among the eight constructs of the job satisfaction. With an ultimate goal to provide free and accessible healthcare services for all Saudi nationals and expatriates who work in the public sector, the Saudi government has devoted enormous resources for the improvement of healthcare. Although their employers sponsor expatriate employees who work in the private sector, the financing for the healthcare in the country is mainly supported by the governmental financing, which comes from the oil and gas revenues. The overall expenditure in healthcare in 2019 was 15.6% of the total budget, which had the third largest share in total budget expenditure (Informa Markets, 2019). Additionally, at present, the government's expenditure on healthcare is mainly channelled for new programmes, for example the localisations of manufacturing of hospital and pharmaceutical products, the reduction of obesity, and the enhancement of life expectancy. Furthermore, the government has been diverting its healthcare funds for the development of a robust healthcare infrastructure through the creation of new hospitals. For example, the government expects to develop new 264 hospitals with more than 71,000 beds, more than 2,750 primary healthcare centres, and 27 specialised medical centres by 2020 (Rahman & Alsharqi, 2018).

All these initiatives are aimed to achieve the objectives and goals of the government's Saudi Vision 2030, which focuses on the promotion of preventive care, reduction of infectious diseases, and the encouragement on the use of primary care as the first step for its citizens. Consequently, the Saudi healthcare system has been ranked at the 26th position out of 191

countries by the WHO in 2018, ahead of its neighbors like the United Arab Emirates (27th), Qatar (44th), and Kuwait (45th), and many of the developed countries like Canada, Australia, and the USA, which have been ranked at the 30th, 32nd, and 37th position respectively (Al-Hanawi et al., 2019). This also suggests that the human resources and physical resources for the Saudi healthcare have increased significantly in recent times. The availability of workplace resources has significant potentials to motivate the employees, resulting in increased job satisfaction, and the JD-R (Job Demand-Resources) model proposed by Demerouti, Bakker, Nachreiner, & Schaufeli (2001) could explain this. According to the JD-R model, the resource availability works as an intrinsic motivation for the employees that can meet the fundamental human needs, for example relatedness, competencies, and autonomy. Therefore, Demerouti et al. (2001) argued that workplace resources facilitate employees achieving their work goals, help performing better, and thus increase the level of job satisfaction. This has been observed among the nurses of the ACH, wherein supportive managers and colleagues provide instrumental support to complete their nursing tasks, which increase the nurses' capacities to complete their work goals, resulting in higher level of better work performance and greater level of job satisfaction. However, this finding is contradictory of the findings of Rahman & Alsharqi (2018), who found that public perception on public health services is low due to long waiting times for diagnostic services and inefficient services, which resulted in the growth of private health sector in Saudi Arabia, as the private sector provides better interfaces between the doctors and the patients.

Referring to Table 5, the second most rated construct of the job satisfaction is the work itself related to the working conditions. This suggests that, for the nurses in the AHC, the work itself plays a significant role in their job satisfaction. In general, employees want to work in organisations that have competitive environment and do not offer monotonous and continuous tasks each day. Therefore, work varieties and instructions of works are significant in relation to job satisfaction. In fact, jobs that have low level of mobility and diversity result in fatigues and impatience, while higher levels of mobility and diversities can result in

nervousness and stresses among the employees (Arnold & Fellman, 1986). Therefore, the work itself requires a fine balance between diversity and mobility through the enrichment of intrinsic factors. Herzberg's two-factor theory supports this view, as intrinsic factors like recognition for achievement, responsibilities, and advancement within the work can influence the level of job satisfaction. From religious perspective, nursing as a profession has a good reputation, and this has been observed from the time of Prophet Muhammad (peace be upon him) during the times of war in ancient Saudi Arabia (AlYami & Watson, 2014). Consequently, being a traditionally Muslim country, nurses in Saudi Arabia get their job satisfaction from the gratifications, fulfilments, and enjoyments that come from their nursing tasks. These are not the fringe benefits or money that come from the work, rather it is related to the feelings that are derived from the work for the nurses. This has been supported by the Locke's (1976, p.1300) definition of job satisfaction – 'a pleasurable or positive emotional state resulting from the appraisals of one's job or job experience'. Locke's (1976) definition implies that job satisfaction comes from the feelings, thinking, and cognition of the work itself, and the finding of this study has been supported by this definition. However, AlYami & Watson (2014) noted that despite its presence as a respected profession in Islam, nursing is not accepted as a respected profession in the Saudi culture due to the limited options of work-life balance, the poor image of nursing profession, and the rule of male-female segregation in the Saudi society.

The third ranking job determinant is the social relationship and communication. The social relationship and communication leads to collaboration process, which is the central for the nurses in the ACH. It appears that the MoH and the management of the ACH has developed a strong collaboration that works on mutual respect and trust, which also necessitates competencies, confidence, and commitments from all the stakeholders, including the nurses. In nursing profession, intra-professional collegialism and interdisciplinary collaborations are highly desirable, as the former enables nurses sharing their knowledge and feedbacks, while the latter facilitates nurses work together through the application of problem-

focused processes (Ylitomanen et al., 2019). Consequently, nurses in the ACH work through both the intra-professional collegialism and interdisciplinary collaborations, which result in enhanced coordination, professionalism, communications, shared processes, and conflict management (Dougherty & Larson, 2010). This finding has been supported by Moore, Prentice, & McQuestion (2015), demonstrating that social interactions are significant to patient care and they increase collaborative relationships among the nurses, which increases the job satisfaction among the nurses. On the other hand, poor nurse-nurse relationships or lack of social relationships and communications increase the potential for higher level of nurse turnover (Tuckett et al. 2015).

The fourth ranking job satisfaction determinant is the relationship with management. This is due to the fact that the working conditions in the ACH are also under the discretions of the management, and consequently when the nurses are more satisfied with their overall working conditions, they would consider their relationships with the management at the higher level, which results in higher level of job satisfaction. This can be explained through the LME (Leader-Member Exchange) theory of leadership (Scandura & Graen, 1984), which is one of the widely accepted theories in relation to the explanation for the relationships between the supervisors and their subordinates. According to Scandura & Graen (1984), the LME theory suggests that management needs to encourage positive interactions among the leaders and their employees through various exchange levels. However, the interaction levels differ in relation to quality, and higher quality workplace interactions lead to mutual trust, obligations, internal motivations, and respects for the members of the organisations. Consequently, higher quality LME employees tend to receive more supports and attentions from their leaders, which result in higher level of job satisfaction. This has been supported by Tran et al. (2018), demonstrating that relationships between leaders and their staff nurses make considerable contributions to the quality of workplace relationships and nurses' performance, which resulted in higher level of job satisfaction among the nurses.

The fifth determinant of the job satisfaction is the autonomy, and the Job Characteristic theory (JCT) of Hackman & Oldham (1976). The basic precept of the JCT is that individuals could be motivated by through the contentment of their jobs' aspects (Hackman & Oldham, 1976). In other words, when individuals consider that they enjoy their jobs and the jobs have meaningful purposes, individuals start to like their jobs, which will motivate them for performing the tasks well (Pham, 2016). According to Hackman & Oldham (1976), the JCT has five basic characteristics that are applicable to any type of job, and the five characteristics are: skill variety, task identity, task significance, autonomy, and job feedback. In relation to the JCT, skill variety refers to the degree to which the task necessitates an individual utilising his/her multiple high-level of skills, while the task identity refers to the extent to which an individual is in control to complete an identifiable piece of task from beginning to the end. In relation to the JCT, the task significant refers to whether an individual's work considerably affects other individuals' tasks, health, and wellbeing. Similarly, autonomy refers to the extent to which an individual has the freedom of choosing how to carry out his/her tasks, while feedback refers to the extent to which individuals learn how effective they are being at the work. According to the JCT, these five fundamental characteristics are the initiating point of the psychological state that, in the end, result in the outcomes, such as job performance, satisfaction in the job, individual motivation, and job turnover. According to Hackman & Oldham (1976), the JCT has three psychological states, which are also influenced by these five fundamental traits, and the first three fundamental traits, in combination, result in the perception of meaningfulness of task. Autonomy produces feelings of responsibility, while feedback generates knowledge that results in the outcomes of the task. According to Hackman & Oldham (1976), the good or bad outcomes of the tasks are the product of high or low degree of happiness that correspond to the fundamental traits. Therefore, it can be argued that nurses in the ACH need to feel the sense of freedom and independence when they perform their tasks, which allow them having ownerships and responsibilities to the success or failure in the work environment. Autonomy is also a factor in

Herzberg's two-factor theory that can motivate employees, influencing the overall job satisfaction level.

The six ranking determinant of job satisfaction is the scheduling. It has been noted earlier that Saudi Arabia has been experiencing a chronic shortage of nurses, and this shortage of nurses has been affecting the nurses' capability for deciding and changing their work schedules. Because of the lack of personnel that can cover particular shifts like weekends or night shifts, nurses have less flexibilities for getting holidays, off during the weekends, and scheduling that are convenient for their working hours by bringing in a balance between their work and personal life. This finding has been supported by Alboliteeh et al. (2017). The seventh ranked determinant of job satisfaction is the development opportunities and promotion, and it is necessary to focus on the career development, which ensures that all nurses receive sufficient training in an attempt to provide the best possible care. Development programmes, for example support for continuous education, potential for promotions, and trainings related to specific areas not only crucial for motivating and transforming individuals into competent skilled workers, Price & Reichert (2017) noted that they are also directly associated with the career satisfaction of the nurses.

The least significant determinant of job satisfaction has been noted in this study is the extrinsic reward. As opposed to the general consideration, extrinsic rewards are not only the pertinent aspects that enhance individuals' motivations and therefore influence their job satisfaction. Considering Figure 5 in the previous chapter, it has been noted that the relationship between overall job satisfaction and extrinsic reward has the lowest value among all the eight constructs of job satisfaction. The two-factor theory proposed by Herzberg et al. (1957) suggests that extrinsic rewards explain only half of the approach of the employees' motivations and job satisfaction. According to Herzberg et al. (1987), extrinsic rewards are considered as a hygiene factor, and when organisations provide inadequate extrinsic rewards or when there is an absence of extrinsic rewards in the organisations, job dissatisfaction emerges, but they do not result in the motivation among the individuals. Herzberg et al. (1987) noted that the motivating factors mainly emerge from the intrinsic factors, and they increase the motivations among the employees, which result in job satisfaction. Additionally, it has been noted by Messineo et al. (2019) that

the nursing can be considered as an intrinsically motivated profession, wherein the activities related to the nursing are viewed as rewarding by the individuals due to the nature of the job, and this explains why the extrinsic rewards received the lowest score among all the eight constructs.

The research resulted that gender and education levels do not have any effect on the determinants of job satisfaction, while age has an effect on job satisfaction. Contrary to the popular view that women demonstrate higher level of job satisfaction compared to the men in nursing profession (Akbari et al., 2020), this study has not found any effect of gender on the job satisfaction among the Saudi nurse. This could be result of their working type and contract with the ACH, and these nurses work under the MoH, which is trying to provide equal opportunity for both the male and female to meet the growing demand of nurses. Similarly, it was assumed that higher educational levels could create a greater level of job dissatisfaction, as lack of resources create more frustration among the highly educated individuals. This is due to the fact that because of their higher level of insights and experiences, individuals with higher level of education have higher expectations regarding the provided facilities, equipment, and the service quality. However, as the availability of resources has been ranked as the top that determines the level of job satisfaction among the nurses in the ACH, the level of education does not have any influence on the level of job satisfaction. However, Ramoo et al. (2013) found that gender and education level have effect on the level of job satisfaction. Finally, it has been noted that job satisfaction is influenced by age. This is due to the fact that individuals' capability to perform tasks and motivations are compromised because of the increasing age, which also declines the individuals' psychosocial resources and increases the level of stress. Therefore, age has an effect on the job satisfaction, and this finding has been supported by Ramoo et al.

Summary of the Findings

In relation to the first research question, the current study has found that the overall score of the job satisfaction among the nurses of the ACH is 3.33, which is higher than 3 in the 5-point Likert scale. Therefore, this study argues that the existing level of job satisfaction among the nurses who work in the ED in the ACH has a moderate level of job satisfaction. This finding is in accordance with the finding of Alotaibi et al. (2015), but contradictory of the study of Alharbi et al. (2016), which noted that lower level of staffing, increasing work-load, lack of autonomies, and lack of managerial

support in relation to decision-making and participations in work scheduling were the contributing factors of low level of job satisfaction. As the overall score of the job satisfaction among the Saudi nurses in the ED in the ACH is 3.33, which is higher than 3 in the 5-point Likert scale, this study finds that the existing level of job satisfaction among the nurses who work in the ED in the ACH has a moderate level of job satisfaction, and thus rejects the H1. In relation to the second research question, the availability of resources in terms of working conditions has the highest score, and thus this construct has the highest level of influence on job satisfaction. The second ranked job satisfaction determinant is the work itself, which is followed by social relationships and communications, relationships with management, autonomy in terms of working conditions, scheduling in terms of working conditions, and the extrinsic rewards. The top two constructs are related to the working conditions, and thus it can be argued that the availability of resources and the work itself have the most influence that determine nurses' level of job satisfaction. Therefore, working conditions are important for the nurses. Additionally, as the extrinsic reward has been ranked at the bottom, it suggests that salary or compensations do not motivate the nurses significantly, and thus this study rejects the second hypothesis: extrinsic rewards are the most influencing factors in job satisfaction among the nurses in ACH.

In relation to the third research question, this study has found that gender and education levels do not have any effect on the determinants of job satisfaction, while age has effect on the determinants of job satisfaction. Therefore, it does not accept or reject the third hypothesis that demographic factors, such as gender, age, and educational levels are strong predictor of overall job satisfaction level. In fact, from the study outcomes of this study, it appears that job satisfaction in relation to the demographic factors is an elusive concept.

References

- AACN. (2013). The essentials of baccalaureate education for professional nursing practice. American Association of Colleges of Nursing (AACN). Available Online: <http://www.aacn.nche.edu/Education/pdf/BaccEssentials08.pdf>
- Aboshaiqah, A. E., Roco, I. M., Pandaan, I. N., Baker, O. G., Tumala, R. B., & Silang, J. P. B. (2018). Challenges in the clinical environment: The Saudi student nurses' experience. *Education Research International*, 2018, 3652643, 1-10. Available Online: <http://downloads.hindawi.com/journals/edri/2018/3652643.pdf>
- Abualrub, R. F. (2007). Nursing shortage in Jordan: what is the solution? *Journal of Professional Nursing*, 23(2), 117–120. Available Online: <https://pubmed.ncbi.nlm.nih.gov/17383605/>
- AIHW. (2013). Nursing and Midwifery Workforce. Australian Institute of Health and Welfare (AIHW). Available Online: <http://www.aihw.gov.au/WorkArea/DownloadAsses.aspx?id=60129545314>
- Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2002). Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *The Journal of American Medical Association*, 288(16), 1987-1993. Available Online: <https://jamanetwork.com/journals/jama/fullarticle/195438>
- Akbari, M., Bagheri, A., Fathollahi, A., & Darvish, M. (2020). Job satisfaction among nurses in Iran: does gender matter? *Journal of Multidisciplinary Healthcare*, 13, 71-78. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6970606/>
- Alboliteeh, M., Magarey, J., & Wiechula, R. (2017). The Profile of Saudi Nursing Workforce: A Cross-Sectional Study. *Nursing Research and Practice*, 2017, 1710686, 1-9. Available Online: <http://downloads.hindawi.com/journals/nrp/2017/1710686.pdf>
- Al-Dossary, R. N. (2018). The Saudi Arabian 2030 vision and the nursing profession: the way forward. *International Nursing Review*, 65(4), 484-490. Available Online: <https://pubmed.ncbi.nlm.nih.gov/29981166/>
- Al-Hanawi, M. K., Khan, S. A., & Al-Borie, H. M. (2019). Healthcare human resource development in Saudi Arabia: emerging challenges and opportunities – a critical review. *Public Health Reviews*, 40(1), 1-16. Available Online: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6391748/pdf/40985_2019_Article_112.pdf

- Alharbi, J., Wilson, R., & Usher, K. (2016). The factors influencing burnout and job satisfaction among critical care nurses: a study of Saudi critical care nurses. *Journal of Nursing Management*, 24(6), 708-717. Available Online: <https://pubmed.ncbi.nlm.nih.gov/27189515/>
- Aljohani, K. A. (2019). Nurses' job satisfaction: A multi-centre study. *Saudi Journal for Health Sciences*, 8, 167-171. Available Online: <http://www.saudijhealthsci.org/downloadpdf.asp?issn=2278-0521;year=2019;volume=8;issue=3;spage=167;epage=181;aui=Aljohani;type=2>
- Alotaibi, J., Paliadelis, P., & Valenzuela, F-R. (2015). Factors that affect the job satisfaction of Saudi Arabian nurses. *Journal of Nursing Management*, 24(3), 275-282. Available Online: <https://pubmed.ncbi.nlm.nih.gov/26260125/#:~:text=Results%3A%20Four%20main%20themes%20emerged,of%20religion%20on%20job%20satisfaction.>
- AlYami, M. S., & Watson, R. (2014). An overview of nursing in Saudi Arabia. *Journal of Health Specialties*, 2(1), 10-12. Available Online: <http://www.thejhs.org/article.asp?issn=2468-6360;year=2014;volume=2;issue=1;spage=10;epage=12;aui=AlYami>
- Arnold, H. J., & Fellman, D. C. (1986). *Organisational Behaviour*. New York, NY: McGraw-Hill.
- Ayivi-Guedeoussou, N. (2016). *The Determinants of Job Satisfaction among Nurses, Midwives, and Auxiliary Nurses in Health Clinics: The Case of Benin, West Africa*. Doctoral Thesis, Pardee RAND Graduate School. Available Online: https://www.rand.org/content/dam/rand/pubs/rgs_dissertations/RGSD300/RGSD373/RAND_RGSD373.pdf
- Broches, R. S. (2008). Unravelling the Hawthorne Effect: An Experimental Artefact 'Too Good to Die'. Bachelor Thesis, Wesleyan University. Middletown, CT: Wesleyan University. Available Online: <https://pdfs.semanticscholar.org/e84b/265e6d18325111a86cceca2ca21d32ac651f.pdf>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands – Resources Model of Burnout. *Journal of Applied Psychology*, 86(3), 499-512. Available Online: https://www.researchgate.net/publication/11920243_The_Job_Demands-Resources_Model_of_Burnout

- Dougherty, M. B., & Larson, E. L. (2010). The Nurse-Nurse Collaboration Scale. *Journal of Nursing Administration*, 40(1), 17–25. Available Online: <https://pubmed.ncbi.nlm.nih.gov/20010373/>
- Drennan, V. M., & Ross, F. (2019). Global nurse shortages – the facts, the impact and action for change. *British Medical Bulletin*, 130(1), 25-37. Available Online: <https://academic.oup.com/bmb/article/130/1/25/5487611>
- Edward, K., Ousey, K., Warelow, P., & Lui, S. (2014). Nursing and aggression in the workplace: a systematic review. *British Journal of Nursing*, 23(12), 653-659. Available Online: <https://www.magonlinelibrary.com/doi/abs/10.12968/bjon.2014.23.12.653>
- Ghasemi, A., & Zahediasl, S. (2012). Normality test for statistical analysis: A guide for non-statisticians. *International Journal of Endocrinology Metabolism*, 10(2), 486-489. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3693611/>
- Gibson, J. L., Ivancevich, J. M., Donnelly, J. H., & Konopaske, R. (2009). *Organisations: Behaviour, Structure, Process* (14th ed.). New York, NY: McGraw-Hill/Irwin.
- Gomez-Urquiza, J., De la Fuente-Solana, E., & Albendín-García, L. (2017). Prevalence of Burnout Syndrome in Emergency Nurses: A Meta-Analysis. *Critical Care Nurse*, 37(5), e1-e9. Available Online: <https://aacnjournals.org/ccnonline/article/37/5/e1/20779/Prevalence-of-Burnout-Syndrome-in-Emergency-Nurses>
- Gurbuz, A. (2007). An Assessment On the Effect of Education Level On the Job Satisfaction from The Tourism Sector Point of View. *Journal of Dogus University*, 8(1), 36-46. Available Online: <https://core.ac.uk/download/pdf/47254406.pdf>
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organisational Behaviour and Human Performance*, 16(1), 250-279. Available Online: http://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Group_Performance/Hackman et al 1976 Motivation thru the design of work.pdf
- Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2020). *Nursing Shortage*. Treasure Island, FL: StatPearls Publishing. Available Online: <https://www.ncbi.nlm.nih.gov/books/NBK493175/?report=reader#!po=4.54545>
- Hargreaves, K. (2019). *A History of the Male Nurse*. Bridlington: Lodge Books.

- Harper, S., & Mousa, F-T. (2013). *Time and Motion Studies*. Oxford: Oxford University Press.
- Healy, K. (2016). A theory of human motivation by Abraham H. Maslow - Reflection. *The British Journal of Psychiatry*, 208(4): 313. Available Online: <https://europepmc.org/article/med/27036694>
- Hellerawa, K. S. S. M., & Adambarage, D. A. C. (2015). The Nursing Shortage Impact on Job Outcome (The Case in Sri Lanka). *Journal of Competitiveness*, 7(3), 75-94. Available Online: <https://pdfs.semanticscholar.org/81a9/d7b5761574caf5480d912805a4e2c9c7bd a5.pdf>
- Herzberg, F., Mausner, B., Peterson, R. D., & Capwell, D. F. (1987). *Job attitudes: Review of research and opinion*. New York, NY: Garland Publishing.
- Herzberg, F., Mausner, B., Peterson, R., & Capwell, D. (1957). *Job attitudes: Review of research and opinion*. Pittsburgh, PA: Psychological Service of Pittsburgh.
- Hoppock, R. (1935). *Job Satisfaction*. New York, NY: Harper.
- Hwang, J-I., Lou, F., Han, S. S., Cao, F., Kim, W. O., & Li, P. (2009). Professionalism: The major factor influencing job satisfaction among Korean and Chinese nurses. *International Nursing Review*, 56(3), 313–318. Available Online: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1466-7657.2009.00710.x>
- ICNM. (2018). World Health Organisation Nursing & Midwifery Factsheet. *International Centre on Nurse Migration (ICNM)*. Philadelphia, PA: ICNM. Available Online: <https://www.intlnursemigration.org/wp-content/uploads/2019/08/2018-WHO-Nursing-Factsheet.pdf>
- Informa Markets. (2019). *2019 Saudi Arabia Healthcare Industry Overview: Towards the healthcare goals of Saudi Vision 2030*. Available Online: <https://www.globalhealthsaudi.com/content/dam/Informa/globalhealthsaudi/downloads/GHE19-KSA-HEALTHCARE-INDUSTRY-OVERVIEW.pdf>
- Jones, T. L. (2011). *Effects of Motivating and Hygiene Factors on Job Satisfaction Among School Nurses*. Doctoral Thesis. Minneapolis, MN: Walden University. Available Online: <https://www.semanticscholar.org/paper/Effects-of-Motivating-and-Hygiene-Factors-on-Job-Jones/7829de1ee3f3dbbdee948b069c4bf748f9102a5e>
- Judge, T. A., Parker, S. K., Colbert, A. E., Heller, D., & Ilies, R. (2002). Job Satisfaction: A Cross-Cultural Review. In: N. Anderson, D. S. Ones, H. K.

- Sinangil, & C. Viswesvaran (Eds.). *Handbook of Industrial, Work and Organisational Psychology – Volume 2* (pp. 25-52). London: SAGE.
- Kacel, B., Miller, M., & Norris, D. (2005). Measurement of nurse practitioner job satisfaction in a Midwestern state. *Journal of the American Academy of Nurse Practitioners*, 17, 27–32. Available Online: <https://www.ncbi.nlm.nih.gov/pubmed/15679881#:~:text=Measurement%20of%20nurse%20practitioner%20job%20satisfaction%20in%20a%20Midwestern%20state,%2C%20Millar%20M%2C%20Norris%20D.&text=CONCLUSION%3A%20Overall%20job%20satisfaction%20of,extrinsic%20factors%20of%20their%20jobs.>
- Khamisa, N., Peltzer, K., Ilic, D., & Oldenburg, B. (2017). Effect of personal and work stress on burnout, job satisfaction and general health of hospital nurses in South Africa. *Health SA Gesondheid*, 22, 252-258. Available Online: <https://www.sciencedirect.com/science/article/pii/S1025984816300412#bib38>
- Khunou, S. H., & Davhana-Maselesele, M. (2016). Level of job satisfaction amongst nurses in the North-West Province, South Africa: Post occupational specific dispensation. *Curationis*, 39(1), 1438. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6091620/>
- Larson, J. R., & Callahan, C. (1990). Performance monitoring: How it affects work productivity. *Journal of Applied Psychology*, 75(5), 530-538. Available Online: <https://insights.ovid.com/applied-psychology/japsy/1990/10/000/performance-monitoring-affects-work-productivity/9/00004565>
- Lephalala, R. (2006). Factors influencing nursing turnover in selected private hospitals in England. Master's thesis, University of South Africa, Pretoria, South Africa.
- Liminana-Gras, R. M., Sanchez-Lopez, M. P., Roman, A. I. S-S., & Corbalan-Berna, F. J. (2013). Health and gender in female-dominated occupations: The case of male nurses. *The Journal of Men's Studies*, 21(2), 135-148. Available Online: <https://journals.sagepub.com/doi/10.3149/jms.2102.135>
- Liu, J. X., Goryakin Y., Maeda, A., Bruckner, T., & Scheffler, R. (2016). *Global Health Workforce Labour Market Projections for 2030*. Policy Research Working Paper 7790. Washington, DC: The World Bank. Available Online: <http://documents1.worldbank.org/curated/en/546161470834083341/pdf/WPS7790.pdf>

- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organisational psychology* (pp. 1297-1349). Chicago: Rand McNally.
- Luthans, F. (2011). *Organisational Behaviour: An Evidence-Based Approach* (12th ed.). New York, NY: McGraw-Hill.
- Marc, M., Bartosiewicz, A., Burzynska, J., Chmiel, Z., & Januszewicz, P. (2018). A nursing shortage – A prospect of global and local policies. *International Nursing Review*, 66(1), 9–16. Available Online: <https://onlinelibrary.wiley.com/doi/full/10.1111/inr.12473>
- Maslow, A. H. (1976). A theory of human motivation. In: M. Weir (Ed.), *Job Satisfaction: Challenge and Response in Modern Britain* (pp. 69-75). Glasgow: William Collins.
- 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), 202-210. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3201822/pdf/nihms285341.pdf>
- Messineo, L., Allegra, M., & Seta, L. (2019). Self-reported motivation for choosing nursing studies: a self-determination theory perspective. *BMC Medical Education*, 19(192), 1-14. Available Online: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6558786/pdf/12909_2019_Article_1568.pdf
- MGI. (2015), *Saudi Arabia beyond oil: The investment and productivity transformation*. McKinsey Global Institute (MGI). Available Online: <https://www.mckinsey.com/featured-insights/employment-and-growth/moving-saudi-arabias-economy-beyond-oil>
- Mitchell, J. E. (2009). *Job Satisfaction and Burnout Among Foreign-Trained Nurses in Saudi Arabia: A Mixed-Method Study*. Doctoral Thesis, University of Phoenix. Available Online: https://www.researchgate.net/profile/Joan_Mitchell5/publication/36711977_Job_satisfaction_and_burnout_among_foreign-trained_nurses_in_Saudi_Arabia_A_mixed-method_study/links/59107c58458515bbcb48c087/Job-satisfaction-and-burnout-among-foreign-trained-nurses-in-Saudi-Arabia-A-mixed-method-study.pdf

- Moore, J., Prentice, D., & McQuestion, M. (2015). Social interaction and collaboration among oncology nurses. *Nursing Research and Practice*, 2015, 248067. <https://www.hindawi.com/journals/nrp/2015/248067/>
- Morgan, J. C., & Lynn, M. R. (2009). Satisfaction in nursing in the context of shortage. *Journal of Nursing Management*, 17(3), 401–410. Available Online: <https://pubmed.ncbi.nlm.nih.gov/21456320/>
- Morrison, L., & Joy, J. (2016). Secondary traumatic stress in the emergency department. *Journal of Advanced Nursing*, 72(11), 2894-2906. Available Online: <https://onlinelibrary.wiley.com/doi/abs/10.1111/jan.13030>
- Moulds, J. (2020). On World Health Day, new report says the world needs 6 million more nurses. *World Economic Forum*. Available Online: <https://www.weforum.org/agenda/2020/04/nursing-report-who-nurses-coronavirus-pandemic-health-goals/>
- Mullins, L. J. (2010). *Management & Organisational Behaviour* (9th ed.). Essex: Pearson.
- Nwagwu, W. E. (2015). Demographic and Maslow's Motivation Predictors of Job Satisfaction of Information Technology Artisans in Nigeria. *iConference 2015 Proceedings*. Available Online: <https://www.ideals.illinois.edu/handle/2142/73647>
- Park, H. J., Mitsuhashi, H., Fey, C. F., & Bjorkman, I. (2003). The effect of human resource management practices on Japanese MNC subsidiary performance. A practical mediating model. *International Journal of Human Resource Management*, 14(8), 1391-1406.
- Park, H. M. (2008). Univariate Analysis and Normality Test Using SAS, Stata, and SPSS. Indiana Business Research Centre of the Kelley School of Business, Indiana University. Available Online: <http://education.exeter.ac.uk/download.php?id=10414>
- Pham, M. Q. (2016). Job Satisfaction and Its Relationships with Age, Gender and Educational Background in a Vietnamese Context. Master's Thesis. Manawatu, New Zealand: Massey University. Available Online: https://mro.massey.ac.nz/bitstream/handle/10179/9915/02_whole.pdf
- Price, S., & Reichert, C. (2017). The Importance of Continuing Professional Development to Career Satisfaction and Patient Care: Meeting the Needs of Novice to Mid- to Late- Career Nurses throughout Their Career Span. *Administrative Sciences*, 7(2), 1-13. Available Online: <https://www.mdpi.com/2076-3387/7/2/17>

- Rahman, R., & Alsharqi, O. Z. (2018). What drove the health system reforms in the Kingdom of Saudi Arabia? An analysis. *The International Journal of Health Planning and Management*, 34(1), 100-110. Available Online: <https://onlinelibrary.wiley.com/doi/full/10.1002/hpm.2584>
- Ramoo, V., Abdullah, K., and Piaw, C. (2013). The relationship between job satisfaction and intention to leave current employment among registered nurses in a teaching hospital. *Journal of Clinical Nursing*, 22(21-22), 3141-3152. Available Online: <https://pubmed.ncbi.nlm.nih.gov/24118518/>
- Robbins, S. P., & Judge, T. A. (2013). *Organisational Behaviour* (15th ed.). Upper Saddle River, NJ: Pearson.
- Royal College of Nursing. (2020). The role of nursing staff in public health. Available Online: <https://www.rcn.org.uk/clinical-topics/public-health/the-role-of-nursing-staff-in-public-health>
- Scandura, T. A., and Graen, G. B., (1984), Moderating Effects of Initial Leader-Member Exchange Status on the Effects of a Leadership Intervention. *Journal of Applied Psychology*, 69, 428-436. Available Online: <https://doi.org/10.1037/0021-9010.69.3.428>
- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(62), 1-11. Available Online: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3841-z>
- Seguin, M. J. (1997). *Motivation, Job Satisfaction, Needs, and Vocational Preferences of Urban Secondary Teachers and Administrators*. Master Thesis. Windsor, ON: University of Windsor. Available Online: <https://core.ac.uk/download/pdf/72774943.pdf>
- Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (Complete samples). *Biometrika*, 52(3-4), 591-611. Available Online: <https://www.jstor.org/stable/2333709?seq=1>
- Spear, J. (2006). Why do health professionals work in a community mental health service? *Australasian Psychiatry*, 14(2), 175-179. Available Online: <https://journals.sagepub.com/doi/10.1080/j.1440-1665.2006.02260.x>
- Tervo-Heikkinen, T., Partanen, P., Aalto, P., & Vehvilainen-Julkunen, K. (2008). Nurses work environment and nursing outcomes: A survey study among Finnish university hospital registered nurses. *International Journal of Nursing*

- Practice, 14, 357–365. Available Online: <https://pubmed.ncbi.nlm.nih.gov/18808536/>
- The World Bank. (2020). Population, total – Saudi Arabia. Available Online: <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=SA>
- Toh, S. G., Ang, E. A., & Devi, M. K. (2012). Systematic review on the relationship between the nursing shortage and job satisfaction, stress and burnout levels among nurses in oncology/haematology settings. *International Journal of Evidence-Based Healthcare*, 10(2), 126-141. Available Online: <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1744-1609.2012.00271.x>
- Tran, K. T., Nguyen, P. V., Dang, T. T. U., & Ton, T. N. B. (2018). The Impacts of the High-Quality Workplace Relationships on Job Performance: A Perspective on Staff Nurses in Vietnam. *Behavioural Sciences*, 8(12), 109. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6316783/>
- Tuckett, A., Winters-Chang, P., Bogossian, F., & Wood, M. (2015). 'Why nurses are leaving the profession...lack of support from managers': What nurses from an e-cohort study said. *International Journal of Nursing Practice*, 21(4), 359–366. Available Online: <https://pubmed.ncbi.nlm.nih.gov/24571860/>
- United Nations. (2015). *World Population Ageing 2015*. New York, NY: United Nations. Available Online: https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2015_Report.pdf
- United Nations. (2017). World population projected to reach 9.8 billion in 2050, and 11.2 billion in 2100. New York, NY: United Nations. Available Online:
- WHO. (2020). Nursing and Midwifery. World Health Organisation (WHO). Available Online: <https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery>
- Worrell, T. G. (2004). *School Psychologists' Job Satisfaction: Ten Years Later*. Doctoral Thesis. Blacksburg, VA: Virginia Polytechnic Institute and State University. Available Online: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.576.8330&rep=rep1&type=pdf>
- Ylitomanen, T., Turunen, H., Mikkonen, S., & Kvist, T. (2019). Good nurse–nurse collaboration implies high job satisfaction: A structural equation modelling approach. *Nursing Open*, 6(3), 998-1005. Available Online: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6650654/#nop2279-bib-0026>

Zarea, K., Negarandeh, R., & Dehghan-Nayeri, N. (2009). Nursing staff shortages and job satisfaction in Iran: Issues and challenges. *Nursing and Health Sciences*, 11(3), 326–331. Available Online: <https://pubmed.ncbi.nlm.nih.gov/19689643/>

