

Nurses' Work Motivation and their Demographics: Basis for Human Resource Management

Richard Dennis Juinio Dayrit

College of Nursing, University of Hail, Kingdom of Saudi Arabia

ABSTRACT

This study assessed the level of work motivation of 245 nurses generated through snowball sampling in a tertiary government hospital in Hail City, Kingdom of Saudi Arabia using the Multidimensional Work Motivation Scale. The results indicated that the nurses had a low level of amotivation, moderate levels of all subtypes of extrinsic regulation, and moderate levels of intrinsic regulation leading to an overall moderate level of work motivation. Significant differences in levels of work motivation were observed in the domain of amotivation when nurses were grouped according to work position; in the domain of extrinsic motivation-social when nurses were grouped according to civil status, monthly salary and years of experience in the institution; in the domain of extrinsic motivation-material when nurses were grouped according to years of experience in the institution; in the domain of introjected regulation when the nurses were grouped according to age and civil status; and in the domains of identified regulation and intrinsic motivation when they were grouped according to civil status ($p \leq 0.05$). Hospital administrators need to implement specific human resource management strategies such as: (1) the implementation of a fair system of staff performance appraisal through management by objectives; (2) the provision of training needs of staff for learning and career development; (3) mechanisms that foster social support among healthcare teams; (4) mechanisms that promote nurse engagement, autonomy and empowerment; and (5) a consistent and equitable system of rewards and promotions in order to enhance the level of work motivation of nurses.

Keywords: Work Motivation, Amotivation, Extrinsic Motivation, Intrinsic Motivation, Human Resource Management

INTRODUCTION

Work motivation is a multidimensional assemblage of aggressive, dynamic and spirited drives emanating from within individuals and their surroundings that trigger work-related behaviors that allow them to act and function at their best [1, 2]. The Self-Determination Theory, which finds application in a variety of fields, depicts the complexity of various domains of work motivation driving complex individuals through a taxonomy that ranges from amotivation to intrinsic motivation with extrinsic motivation and its four sub-types in between [3]. Amotivation is a state wherein a person is totally non-autonomous, is devoid of a drive, and is laboring to fulfill any need

[4]. Attributes of amotivation include an absence of perceived confidence, an absence of value or even a perception of irrelevance [3]. Extrinsic motivation is a drive derived from external sources such as the work institution, the work environment or the work itself that elicits behavior or work engagement for the purpose of gaining an external reward or to dodge retribution [5]. More specifically, extrinsic motivation within a healthcare setting allows nurses to adopt exemplary behaviors in order to pursue accolades, honor, promotions, bonuses and compensation [6]. The four sub-types of extrinsic motivation are: (1) External Regulation – which pertains to performing an activity to acquire benefits or avoid sanctions carried out by others; (2) Introjected Regulation – which suggests behavior regulation stemming from inner compelling impulses such as self-involvement, humiliation, and remorse; (3) Identified Regulation – which involves undergoing an activity by virtue of relating with its value and significance and embracing it as one's own; and (4) Integrated Regulation which occurs when identified regulations are totally comprehended and incorporated to align with one's values and concerns [3]. Intrinsic motivation is a drive that comes from within based on personal interests, values and morality [4]. It produces inherently gratifying and engaging behavior borne from passion, a sense of achievement, elation and pleasure obtained from performing the activities related to work and their subsequent outcomes [7, 8, 9] that makes the behavior its own reward [10]. For nurses working within a healthcare institution, intrinsic motivation takes the form of a sense of self-fulfillment and personal satisfaction in performing duties and responsibilities rather than laboring in pursuit of external benefits [6].

Human resources represent the most significant component of the healthcare sector as well as the most important input within effective healthcare systems [11, 12, 13]. Recognized as the foundation of health systems, excellent and motivated health workers are regarded as the prime movers of healthcare systems performance [14, 15]. Highly structured organizations involved in health care and elsewhere that strictly adhere to quality assurance practices and human resource management mechanisms foster a healthy culture in the midst of an environment characterized by constructive competition, which in turn, generates motivation among its constituents in terms of the attainment of quality and fiscal targets [16, 17]. More importantly, health worker motivation has been regarded as a principal ingredient necessary for the strengthening of healthcare systems [18].

Nurses are widely regarded as the most important human resource in healthcare organizations as they comprise the biggest group of health care workers and are responsible for the provision of direct care to clients [19]. In the process of administering care and providing physical, psychological and affective care to clients and their significant others, nurses perform pivotal tasks such as continued monitoring and assessment of clients, providing nursing interventions to abate complications and sequelae, coordinating with members of the healthcare team, and imparting client discharge instructions which positively impact hospital safety, quality and costs [20]. As such, nurses are considered to directly influence patient safety and quality of care [21]. More significantly, work motivation among nurses likewise determine their own sense of wellbeing, job satisfaction, work performance levels, work engagement, work commitment and intention to stay [22], which in turn, indirectly influences the quality of health care delivery.

Poor motivation levels as well as the absence of motivation among nurses have an unfavorable effect on performance outcomes at the level of the individual, the organization and the health care

delivery system. Lowly motivated nurses displayed poorer performance outcomes relative to highly motivated counterparts [23]. Decreased levels of work motivation among nurses brought about by the strain, tension and conflict that characterize work in various healthcare settings may bring about subpar performance, increased turnover [21] and even a tendency to leave the profession [24]. As such, amotivation among nurses generates a detrimental effect on both the health and safety of patients [25]. More significantly, the inimical impact of inadequate motivation levels of nurses in health facilities and healthcare delivery systems is underscored by the inequitable distribution of nursing manpower and the highly apparent shortage of nurses in many countries [26].

As a nurse academician belonging to the Nursing Administration Department in a prestigious higher education institution in Hail, Kingdom of Saudi Arabia, the research investigator is aware that human resource managers should be keen to formulate mechanisms to steer nurses towards the comprehensive and long-term goals of the health care organizations in a manner that is contingent upon the nurses' motivation. Moreover, a harmonious match between constituent assumptions and organizational objectives should be facilitated, making it a must for human resource managers to generate employee motivation that focuses their passions and ambitions toward the aims of the organization [27]. Thus, human resource managers should be thoroughly cognizant of what motivates employees in order to optimize organizational performance [28] and subsequently formulate specific plans to enhance employee motivation [29]. Coupled by the dearth of research investigations related to nurses' motivation in the Kingdom of Saudi Arabia and the dynamic nature of the motivation [30] which makes nurses adjust their behavioral regulations when immersed in variable work conditions and characteristics, it beehoved the research proponent to assess the levels of motivation among nurses in Hail with a view toward designing specific human resource management strategies geared toward enhancing nurses' motivation.

METHODS

Research Design

This study utilized a descriptive, comparative and normative research design. More specifically, it described the demographic profile of study respondents and their level of work motivation. Furthermore, the investigation compared the level of work motivation of the study respondents in the different motivational domains when they were grouped according to their demographic characteristics. The study was likewise normative in nature as it aimed toward identifying specific human resource management strategies geared toward enhancing the level of work motivation of nurses in the research locale.

Study Participants

The current study involved the participation of 245 nurses generated through snowball sampling conducted in a selected tertiary government hospital in Hail City, Kingdom of Saudi Arabia. Male and female nurses currently employed in this hospital composed the population of the study. The inclusion criteria for the study respondents to be part of the sampling frame were: (1) Saudi and non-Saudi nursing personnel; (2) with a minimum of three (3) months' experience in the hospital; and (3) a willingness to participate in the study.

Research Instrument

The study made use of a two-part questionnaire, developed from literature review as well as from researches and studies of various authors pertaining to work motivation. The first part of the researcher-made questionnaire provided information on the demographic profile of the study respondents. More specifically, it generated information on the study respondents' age, gender, civil status, work position, monthly salary and years of work experience in the institution. The second part of the researcher-made questionnaire adopted the Multidimensional Work Motivation Scale (MWMS) developed by Gagne and colleagues. The MWMS, is a self-reported psychometric that elicits the study respondents' work motivation through their responses to nineteen (19) indicators distributed in six (6) motivational domains identified through the multidimensional conceptualization of motivation postulated by the self-determination theory, namely: (1) amotivation (indicators Am1 to Am3); (2) extrinsic regulation – social (indicators Ext-Soc1 to Ext-Soc3); (3) extrinsic regulation – material (indicators Ext-Mat1 to Ext-Mat3); (4) introjected regulation (indicators Introj1 to Introj4); (5) identified regulation (indicators Ident1 to Ident3); and (6) intrinsic motivation (indicators Intrins1 to Intrins3). Study respondents rate the extent each of the indicators correspond to the reason why they would put effort into their work through a seven-point Likert scale as follows: 7 with a verbal interpretation of “completely”; 6 with a verbal interpretation of “very strongly”; 5 with a verbal interpretation of “strongly”; 4 with a verbal interpretation of “moderately”; 3 with a verbal interpretation of “a little”; 2 with a verbal interpretation of “very little”; and 1 with a verbal interpretation of “not at all”. The total score ranges from 19 to 133 with values from 19 to 45, 46 to 91 and 92 to 133 being classified as low, moderate and high level of motivation, respectively [31]. Reliability and validity of the English version of the MWMS has been well established and documented [32].

Ethical Considerations

The opening or cover section of the online questionnaire in Google Forms served as an informed consent form that provided potential study respondents with the purpose of the study, its procedure, aim, risks and benefits, as well as the voluntary nature of participation. The same informed consent form also assured study participants of confidentiality throughout the research process and guaranteed them that there will be no anticipated risks or discomforts involved in participating in this study. Implied consent was obtained from each study respondent upon accomplishment of the online questionnaire. Various measures were taken to protect the anonymity and identity of the study respondents. The data obtained from the accomplished online researcher-made questionnaires were kept secure in the research investigator's Google Drive account which could only be accessed with the correct user name and password and will be destroyed after two years' time.

Data Gathering Procedure

Online data gathering was facilitated through the use of a questionnaire in Google Forms. The research investigator coordinated with the deputy chief nurse of the selected hospital in the process of online gathering of the data. The online link to the questionnaire was sent to head nurses in the different units of the selected hospital and was subsequently referred to all staff nurses and supervisors. Daily progress in the number of study respondents was reported to the deputy chief nurse of the selected hospital. Data gathering commenced from July 26, 2020 until September 03, 2020.

Statistical Analysis

Data was coded for analysis through the use of SPSS version 22. The study respondents' demographic characteristics and self-reported levels of motivation were analyzed and presented using descriptive statistics in the form of frequencies, percentages, means and standard deviations. T-test and one-way analysis of variance (ANOVA) were used to determine the presence of a significant difference in the study respondents' mean levels of work motivation in the different motivational domains when they were grouped according to demographic characteristics. Statistical significance was determined by p-values less than or equal to 0.05.

RESULTS

Table 1. Characteristics of Study Respondents (n = 245)

Demographic Variable	Frequency (n)	Percentage (%)
Age Range		
20 - 29	86	35.1%
30 and above	159	64.9%
Gender		
Male	15	6.1%
Female	230	93.9%
Civil Status		
Single	82	33.5%
Married/Widowed/Separated	163	66.5%
Work Position		
Staff Nurse	204	83.3%
Head Nurse/Supervisor	41	16.7%
Monthly Salary		
Below 5,000 SAR	33	13.5%
5,000 – 10,000 SAR	120	49.0%
Above 10,000 SAR	92	37.6%
Years of Work Experience in the Institution		
Up to three (3) years	54	22.0%
Four (4) to six (6) years	73	29.8%
Seven (7) years and above	118	48.2%

Table 1 shows the characteristics of the study respondents. The predominant portion of the study respondents were in the age range of 30 and above (64.9%), were females (93.9%), were married/widowed/separated (66.5%), and were staff nurses (83.3%). In terms of monthly salary, majority of the study respondents (49.0%) belonged to the salary range of 5,000 to 10,000 SAR. With respect to years of working experience in the institution, most of the study respondents had been employed in the research locale for seven (7) years and above (48.2%).

Table 2. Frequency Distribution, Percentage and Means of Responses of Study Respondents per Indicator in the Domains of Work Motivation

Dimension	Mean	Std. Deviation
Amotivation	2.39	1.20
Extrinsic regulation-social	2.99	1.31
Extrinsic regulation-material	2.76	1.17
Introjected regulation	3.72	1.47
Identified regulation	4.18	1.62
Intrinsic motivation	4.03	1.57

Table 2 shows the frequency distribution, percentage and means of responses of study respondents per indicator in the domains of work motivation. The domain of amotivation obtained the lowest mean (2.39 ± 1.20). The domain of identified regulation acquired the highest mean (4.18 ± 1.62). Meanwhile, the introjected regulation, extrinsic regulation – social and extrinsic regulation – material with means of 3.72 ± 1.47 , 2.99 ± 1.31 and 2.76 ± 1.17 , respectively. The domain of intrinsic motivation garnered a mean score of 4.03 ± 1.57 .

Table 3. Level of Work Motivation of Study Respondents in the Domains of Work Motivation

Work Motivation Domain	Frequency (n = 246)	Percentage (%)
Amotivation		
Low	138	56.33
Moderate	103	42.04
High	4	1.63
Extrinsic Regulation – Social		
Low	79	32.24
Moderate	155	63.27
High	11	4.49
Extrinsic Regulation - Material		
Low	92	37.55
Moderate	147	60.00
High	6	2.45
Introjected Regulation		
Low	50	20.41
Moderate	152	62.04
High	43	17.55
Identified Regulation		
Low	38	15.51
Moderate	147	60.00
High	60	24.49
Intrinsic Motivation		
Low	40	16.33
Moderate	148	60.41
High	57	23.27
Total Score		
Low	38	15.51
Moderate	197	80.41
High	10	4.08

Table 3 shows the frequency distribution and percentage of study respondents classified according to low, moderate and high levels of work motivation in the six domains. With respect to the domain of amotivation, 56.33% of the study respondents had low amotivation levels while 1.63% obtained high amotivation. These results were brought about by the high frequency of study respondents who rated all three indicators under the domain with “Not at all,” coupled with the low frequency of study respondents who likewise rated all three indicators under the domain with “Completely.” This indicates that majority of the nurses in the research locale are motivated. Among the subtypes of extrinsic motivation, close to a quarter of the study respondents (24.49%) displayed a high level of identified regulation, slightly higher than a third of the study respondents (37.55%) had a low level of extrinsic regulation – material, while slightly lower than a third of them (32.24%) obtained a low level of extrinsic regulation – social. In terms of the domain of intrinsic motivation, less than a quarter of the study respondents (23.27%) were rated as having high levels while 16.33% among them exhibited a low level of intrinsic motivation. The majority of the nurses possessed moderate level of work motivation for all the domains except for amotivation. The mean total score of the responses tendered in the research instrument indicated that a predominant portion of the nurses in the research locale (80.41%) possessed a moderate level work motivation.

Table 4. Differences on Work Motivation of the Study Respondents in the Different Domains when they were grouped according to Age

Domain	t-value	df	p-value	Remark
Amotivation	0.156	243	0.876	Not Significant
Extrinsic Regulation - Social	0.898	243	0.370	Not Significant
Extrinsic Regulation -Material	0.612	243	0.541	Not Significant
Introjected Regulation	2.363	243	0.019	Significant
Identified Regulation	1.194	243	0.234	Not Significant
Intrinsic Motivation	1.292	243	0.198	Not Significant

Table 4 shows the results of the t-tests conducted to determine the presence of a significant difference in the means of work motivation of study respondents in the different domains when they were grouped according to age. It revealed a significant difference in the domain of introjected regulation ($p = 0.019$) with the nurses in the age group 20 – 29 (4.02 ± 1.42) having more of this type of extrinsic motivation relative to the nurses in the age range 30 and above (3.56 ± 1.48).

Table 5. Differences on Work Motivation of the Study Respondents in the Different Domains when they were grouped according to Civil Status

Domain	t-value	df	p-value	Remark
Amotivation	-0.639	243	0.523	Not Significant
Extrinsic Regulation - Social	-2.172	243	0.031	Significant
Extrinsic Regulation -Material	-1.844	243	0.066	Not Significant
Introjected Regulation	3.639	243	0.000	Significant
Identified Regulation	2.633	243	0.009	Significant
Intrinsic Motivation	2.855	243	0.005	Significant

Table 5 shows the results of the t-tests conducted to determine the presence of a significant difference in the means of work motivation of study respondents in the different domains when they are grouped according to civil status. It revealed a significant difference in the following domains: (1) in the domain of extrinsic regulation - social ($p = 0.031$), with the married/widowed/separated nurses (3.12 ± 1.33) being more motivated than the nurses who are single (2.74 ± 1.24); (2) in the domain of introjected regulation ($p = 0.000$), with the nurses who are single (4.19 ± 1.54) having more of this type of extrinsic motivation relative to the married/widowed/separated nurses (3.48 ± 1.38); (3) in the domain of identified regulation ($p = 0.009$), with the nurses who are single (4.56 ± 1.71) having more of his type of extrinsic motivation relative to the married/widowed/separated nurses (3.99 ± 1.55); and (4) in the domain of intrinsic motivation ($p = 0.005$), with the nurses who are single (4.45 ± 1.67) being more intrinsically motivated relative to the married/widowed/ separated nurses (3.82 ± 1.49).

Table 6. Results of T-tests for Means of Work Motivation of the Study Respondents in the Different Domains when they were grouped according to Work Position

Domain	t-value	df	p-value	Remark
Amotivation	2.050	241	0.041	Significant
Extrinsic Regulation - Social	1.177	241	0.245	Not Significant
Extrinsic Regulation -Material	0.442	241	0.661	Not Significant
Introjected Regulation	-0.493	241	0.624	Not Significant
Identified Regulation	-0.362	241	0.719	Not Significant
Intrinsic Motivation	-0.876	241	0.382	Not Significant

Table 6 shows the results of the t-tests conducted to determine the presence of a significant difference in the means of work motivation of study respondents in the different domains when they were grouped according to work position. It revealed a significant difference in the domain of amotivation ($p = 0.041$) with staff nurses (2.46 ± 1.15) being more amotivated relative to the group composed of head nurses and supervisors (2.03 ± 1.42).

Table 7. Result of ANOVA for Means of Work Motivation of the Study Respondents in the Different Domains when they were grouped according to Monthly Salary

Domain	F-value	df	p-value	Remark
Amotivation	2.412	244	0.092	Not Significant
Extrinsic Regulation - Social	4.131	244	0.017	Significant
Extrinsic Regulation - Material	0.233	244	0.792	Not Significant
Introjected Regulation	2.161	244	0.117	Not Significant
Identified Regulation*	-	-	-	-
Intrinsic Motivation	0.652	244	0.552	Not Significant

* Test of homogeneity of variances for the domain of Identified Regulation had a p-value of less than 0.05 and hence could not be compared

Table 7 shows the result of the ANOVA conducted to determine the presence of a significant difference in the means of work motivation of study respondents in the different domains when they were grouped according to monthly salary. It revealed a significant difference in the domain of extrinsic regulation - social ($p = 0.017$) with nurses belonging to the salary bracket of 5,000 to 10,000 SAR per month (3.19 ± 1.28) having more of this type of extrinsic motivation relative to the nurses earning above 10,000 SAR per month (2.69 ± 1.24).

Table 8. Result of ANOVA for Means of Work Motivation of the Study Respondents in the Different Domains when they were grouped according to Years of Experience in the Institution

Domain	F-value	df	p-value	Remark
Amotivation	1.891	244	0.153	Not Significant
Extrinsic Regulation - Social	6.190	244	0.002	Significant
Extrinsic Regulation -Material	4.494	244	0.012	Significant
Introjected Regulation	0.486	244	0.616	Not Significant
Identified Regulation	0.392	244	0.676	Not Significant
Intrinsic Motivation	0.961	244	0.384	Not Significant

Table 8 shows the results of the ANOVA conducted to determine the presence of a significant difference in the means of work motivation of study respondents in the different domains when they are grouped according to years of experience in the institution. It revealed a significant difference in the following domains: (1) in the domain of extrinsic regulation – social ($p = 0.002$), with the group of nurses with four (4) to six (6) years of experience in the institution (3.27 ± 1.27) having more this type of extrinsic motivation relative to the group of nurses with an experience of seven (7) years and above in the institution (2.69 ± 1.23); and (2) in the domain of extrinsic regulation – material ($p = 0.012$), with the group of nurses with four (4) to six (6) years of experience in the institution (2.82 ± 1.09) having more this type of extrinsic motivation relative to the group of nurses with an experience of seven (7) years and above in the institution (2.56 ± 1.15).

DISCUSSION

Amotivation is regarded as the utter lack of motivation with respect to a task or an undertaking [32]. It is brought about by an actual or perceived incompetence to carry out a task or a sense of disinterest in it and is regarded as a potent “negative predictor of engagement and learning” [3]. Individuals who are amotivated are commonly detached or lack the capacity to perform an activity and will give up without completing a task [33, 34]. The study revealed that among the different domains of work motivation, the nurse respondents obtained the lowest mean in the domain of amotivation. This result runs parallel with results obtained in a research investigation involving participants from Portuguese organizations hailing from different sectors [35]. Furthermore, the current investigation also showed that majority of the nurse respondents had low levels of amotivation. This result likewise aligns with the findings observed in a similar study conducted among workers in an industrial establishment in the Philippines [31]. Both results reveal that a predominant portion of the nurses in the study locale are motivated. This may be credited to the fact that these registered nurses practicing the profession possess competencies or core abilities [36] which although defined differently in various countries, are compulsory for effectively implementing their role as a nurse, and includes common attributes such as clinical nursing competency or the ability to provide nursing care and professional development or continuous learning, among others [37]. The current investigation likewise revealed that the staff nurses were more amotivated relative to the head nurses and supervisors. This finding supports various other studies that nurse managers were more motivated compared to nursing staff [38, 39].

The domains of extrinsic motivation – material and extrinsic motivation social relate to performance of a task to pursue a personal aim or an organizational policy for the purpose of gaining rewards and other benefits (material) and averting retribution or denunciation as well as enhancing confidence and self-respect (social) [32]. The study revealed that among the different domains of work motivation, the nurse respondents obtained the second lowest mean in the domain of extrinsic motivation – material and the third lowest mean in the domain extrinsic motivation – social (2.99 ± 1.48). This result is again very consistent with the study involving a group of Portuguese workers [35]. The current investigation also showed that 60.00% and 63.27% of the nurses in the current investigation had moderate levels of work motivation in the domain of extrinsic motivation – material and extrinsic motivation – social, respectively. These values are contrary to the results obtained among a group of Saudi nurses in Jeddah where slightly less than half (44.4%) reported high levels of work motivation in both domains [41]. Differences in levels of work motivation are dependent on workplace characteristics [41]. Human resource management strategies to enhance the material component of extrinsic motivation include the presence of a consistent and equitable system of rewards and promotions that offer bonuses, pay-off incentives, perks and promotions to deserving nurses [6, 42, 43]. On the other hand, improvement of the social component of extrinsic motivation involves the provision of social support among members of healthcare teams [39, 44], the presence of a fair system of staff evaluation [45], and the provision of challenging tasks to nurses, achievement of which provides opportunities for learning and subsequent empowerment [46]. The current investigation revealed that the nurses who belonged to the married/widowed/separated group were significantly more motivated than the nurses who are single with respect to the domain of extrinsic regulation – social. This result is contrary to that of a study among nurses in Papua New Guinea that showed that family factors resulted in a decrease in nurses' motivation [47]. The present study also showed that the nurses who belonged to the salary range of 5,000 to 10,000

SAR were significantly more motivated than the nurses who had salaries greater than 10,000 SAR in terms of the domain of extrinsic regulation – social. This indicates that these nurses put more premium on empowerment, peer approval, commendation and acknowledgment rather than on remuneration. Furthermore, the current study also indicated that nurses who had a working experience of four to six years in the institution were significantly more motivated than their counterparts who had been in the institution for seven or more years with respect to the domains of extrinsic regulation – material and extrinsic regulation – social. These findings were consistent with results of two research investigations involving nurses in Turkey [48, 49] but were contrary to those conducted among nurses in Germany [50] and in Zambia [51].

The domain of introjected regulation pertains to behavioral control brought about by internal drivers such as self-admiration, self-pride and the opposing motives of humiliation and disgrace [32]. The current study revealed that the mean of the work motivation of nurses with respect to this domain was slightly less than four (4) on a seven-point scale and that 62.04% of the study participants had a moderate level of work motivation in this domain. This can possibly be attributed to the fact that the study participants were predominantly staff nurses (83.3%) who function under the authority of their respective head nurses and supervisors. These nurses can improve their work motivation in the domain of introjected regulation when psychological needs related to autonomy and competence are addressed. Regarding autonomy, human resource management should be keen to promote workplace characteristics that encourage nurse participation in decision-making, that satisfy the need for them to be consulted and their need to have greater sense of control over their own work to increase work motivation levels [52, 53]. Conversely, psychological needs related to competence can be facilitated by human resource management programs that address training needs, career development and learning [54, 55]. The present investigation revealed that nurses in the age range 20 – 29 were significantly more work motivated than those nurses aged 30 and above in terms of the domain of introjected regulation. This finding may be expected from a complement of study respondents where both age groups are predominantly composed of staff nurses. However, it runs contrary to studies that indicate that older nurses have gained higher levels of autonomy and competence relative to younger ones [39, 50]. Furthermore, the study indicated that single nurses were significantly more work motivated relative to the married/widowed/separated nurses with respect to the domain of introjected regulation. This result is aligned with that of a study among nurses in Papua New Guinea that showed that family factors resulted in a decrease in nurses' motivation [47].

The domain of identified regulation bears upon undertaking of an activity due to the individual finding value in its significance and embraces it as his or her own [32]. The mean value of 4.18 ± 1.71 garnered by the study respondents in this domain was the highest for all domains considered. This finding was once again aligned with the study involving a group of Portuguese workers [35] where identified regulation also bested the other domains albeit with a higher value (mean = 5.59). However, the result that 60.00% of the current study's respondents were classified as having moderate work motivation in the domain of identified regulation was again contrary to the findings of a study involving a group of nurses in Jeddah where 70% of respondents were classified as having high level of work motivation for the said domain [40] and even farther off from the value obtained from workers in an industrial establishment in the Philippines where high level of work motivation for the domain was evident among 90% of the respondents [31]. This indicates that among the study respondents, the process of internalization of the goal to maintain

self-worth was unstable and did not proceed enough for the behavior to be recognized as beneficial, significant and highly valued to create a self-determination to commit to act [3, 56]. As such, human resource management interventions to increase work motivation in terms of the domain of identified regulation should include the implementation of management by objectives as a method of performance appraisal that fosters self-management and personal engagement in goal setting that would generate performance enhancement, an improved sense of identification, career growth and satisfaction [57]. In addition, the study indicated that single nurses were significantly more work motivated relative to the married/widowed/separated nurses with respect to the domain of identified regulation. This finding is consistent with that of a study among nurses in Papua New Guinea that showed that family factors resulted in a decrease in nurses' motivation [47] but is contrary to that of health workers in Tanzania where singles displayed the lowest levels of motivation [58].

Lastly, the domain of intrinsic motivation relates to the performance of an activity as a result of the inherent enthusiasm and gratification it offers to an individual [3]. The current study revealed that the mean of the work motivation of nurses with respect to intrinsic motivation was slightly higher than four (4) on a seven-point scale and that 60.41% of the study participants had a moderate level of work motivation in this domain. The percentage obtained was again much lower compared to a study among nurses in Jeddah where 54.6% of nurses reported high levels of intrinsic work motivation [39]. Specific human resource management interventions that may be implemented to enhance intrinsic work motivation in the study locale include mechanisms that would foster improved nurse engagement, autonomy and nurse empowerment, team communication characterized by openness and workload sharing among nurses and other healthcare professionals [54]. The current study likewise revealed that the group of nurses who were single were significantly more work motivated compared with the group of married/widowed/separated nurses with reference to the domain of intrinsic motivation. This finding is supported by a study among public sector workers in Greece that have shown unmarried individuals possessing higher levels of intrinsic motivation relative to married people [59].

LIMITATIONS OF THE STUDY

The current study delved on quantitative measurements of levels of work motivation among nurses in a tertiary government hospital in Hail City, Kingdom of Saudi Arabia. The limited number of male nurse respondents in the research hospital was insufficient to test for a significant difference in the level of work motivation of nurses in the different domains when they were grouped according to gender. As such, inclusion of various other healthcare workers belonging to different professions from both public and private hospitals will produce a more comprehensive assessment of levels of work motivation within different healthcare institutions in Hail and will provide valuable benchmarks for comparison. More importantly, a follow-up study with a qualitative component that identifies healthcare workers' challenges in relation to work motivation may be suggested to validate the quantitative results.

CONCLUSION

Assessment of the nurses' level of work motivation in the study hospital revealed that a predominant portion of them had low amotivation, moderate levels of all subtypes of extrinsic motivation and moderate levels of intrinsic motivation leading to an overall moderate level of work motivation. The nurses' level of work motivation in the domain of amotivation differed

significantly when they were grouped according to work position. Significant differences were also observed in the domain of extrinsic motivation – social when they were grouped according to civil status, monthly salary and years of experience in the institution, in the domain of extrinsic motivation – material when they were grouped according to years of experience in the institution, in the domain of introjected regulation when they were grouped according to age and civil status, and in the domains of identified regulation and intrinsic motivation when they were grouped according to civil status. Findings indicate the need to consider the implementation of specific human resource management strategies such as: the implementation of a fair system of staff performance appraisal through management by objectives; the provision of training needs of staff for learning and career development; mechanisms that foster social support among members of healthcare teams; mechanisms that promote nurse engagement, autonomy and empowerment; and a consistent and equitable system of rewards and promotions.

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